

=> fil reg
FILE 'REGISTRY' ENTERED AT 11:24:19 ON 03 JUN 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 2 JUN 2010 HIGHEST RN 1226851-61-1
DICTIONARY FILE UPDATES: 2 JUN 2010 HIGHEST RN 1226851-61-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

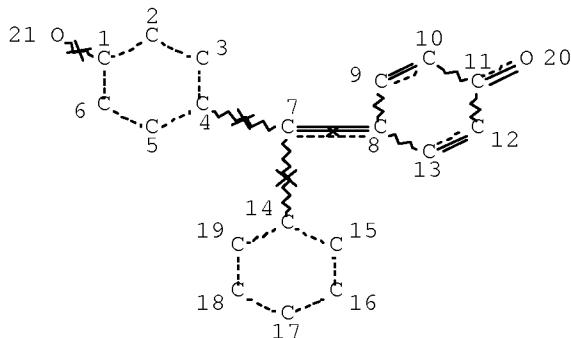
TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

```
=> d que 149
L2      8 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (115-41-3/B1 OR
          1667-99-8/B1 OR 1796-92-5/B1 OR 3564-18-9/B1 OR 7440-05-3/B
          I OR 7440-50-8/B1 OR 7647-10-1/B1 OR 7758-98-7/B1)
L3      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "CHROME AZUROL
          S"/CN
L4      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "CHROME AZUROL
          B"/CN
L6      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "ERIOCHROME
          CYANINE R"/CN
L7      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "PYROCATECHOL
          VIOLET"/CN
L10     STR
```



NODE ATTRIBUTES:

| | | | |
|------------------------|-------|----|----|
| NSPEC | IS RC | AT | 7 |
| NSPEC | IS RC | AT | 21 |
| DEFAULT MLEVEL IS ATOM | | | |

DEFAULT ECLEVEL IS LIMITED

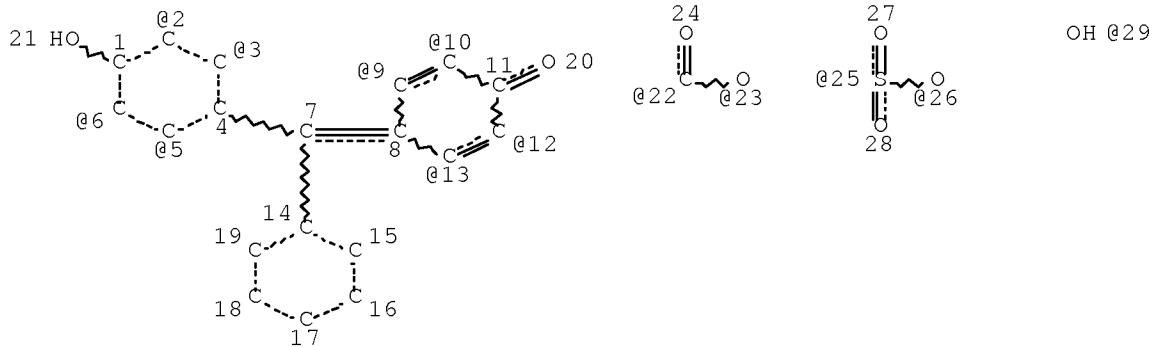
GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE

L14 SCR 1139
L16 931 SEA FILE=REGISTRY SSS FUL L10 AND L14
L17 2 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L16 AND L2
L19 2 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND PD/ELS
L22 124082 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L19
L23 1090 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L17
L24 19 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L22 AND L23
L25 12051 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L16
L26 82 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L22 AND L25
L27 54 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L26 AND ANST/RL
L28 2280 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L3 OR L4 OR L6 OR
L7
L29 39 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L28 AND L22
L30 32 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L29 AND ANST/RL
L31 31 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L30 AND (1840-2003
) /PRY,AY,PY
L33 STR



G1 @30 G1 @31

VAR G1=29/25/26/22/23

VPA 30-2/3/5/6 U

VPA 31-9/10/12/13 U

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 31

STEREO ATTRIBUTES: NONE

L35 167 SEA FILE=REGISTRY SUB=L16 SSS FUL L33
L36 3081 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L35
L37 37 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L36 AND L22
L38 36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L37 AND (1840-2003
) /PRY,AY,PY

```

L40      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 7440-05-3/RN
L41      116334 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L40
L42      36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L38 AND L41
L43      18 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND (1840-2003
          )/PRY,AY,PY
L44      36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L42 OR L43
L45      22 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L31 AND L44
L46      36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L44 OR L45
L48      27 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND L46
L49      36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L46 OR L48

```

=> fil hcap
FILE 'HCAPLUS' ENTERED AT 11:24:34 ON 03 JUN 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Jun 2010 VOL 152 ISS 23
FILE LAST UPDATED: 2 Jun 2010 (20100602/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2010

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 149 1-36 ibib ed abs hitstr hitind

```

L49 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:355210 HCAPLUS Full-text
DOCUMENT NUMBER: 140:353235
TITLE: Test strip for determining creatinine
INVENTOR(S): Kosaka, Hideko
PATENT ASSIGNEE(S): Arkray, Inc., Japan
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

```

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

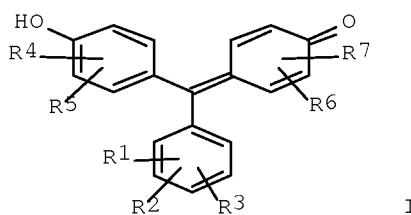
| | | | | |
|---|-------|----------|------------------|------------|
| ----- | ----- | ----- | ----- | |
| WO 2004036225 | A1 | 20040429 | WO 2003-JP13166 | 20031015 |
| <-- | | | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| JP 2004138408 | A | 20040513 | JP 2002-300959 | 20021015 |
| <-- | | | | |
| JP 4214271 | B2 | 20090128 | | |
| AU 2003273007 | A1 | 20040504 | AU 2003-273007 | 20031015 |
| <-- | | | | |
| EP 1560027 | A1 | 20050803 | EP 2003-754123 | 20031015 |
| <-- | | | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1705883 | A | 20051207 | CN 2003-80101391 | 20031015 |
| <-- | | | | |
| CN 100350251 | C | 20071121 | | |
| US 20050266574 | A1 | 20051201 | US 2005-530790 | 20050408 |
| <-- | | | | |
| PRIORITY APPLN. INFO.: | | | JP 2002-300959 | A 20021015 |
| <-- | | | | |
| WO 2003-JP13166 | | | | |
| <-- | | | | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 140:353235

ED Entered STN: 30 Apr 2004

GI



AB A novel test strip for determining creatinine is provided. The test strip is produced by incorporating a compound represented by the general formula (I), a metal capable of reacting with the compound to form a color complex, and a buffer into a porous material. The quantity of creatinine is determined by optically measuring the quantity of a color complex formed from the compound and the metal, and determining the inhibition of this color complex formation

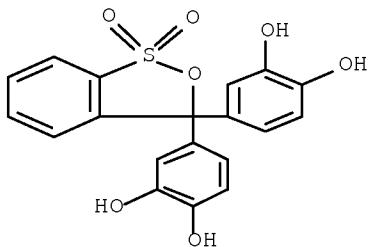
by creatinine. In I, R1 is H, SO₃X, or COOX; R4 and R6 are each independently OH, SO₃X, or COOX; R2, R3, R5, and R7 are each independently H, OH, Cl, Br, I, NO₂, NO, or CH₃; and Xs in R1, R4, and R6 are each independently H, Na, K, or NH₄.

IT 115-41-3 1667-99-8, Chrome Azurol S
 1796-92-5 3564-18-9, Eriochrome Cyanine R
 7440-05-3, Palladium, uses 7647-10-1, Palladium chloride

(test strip for determining creatinine)

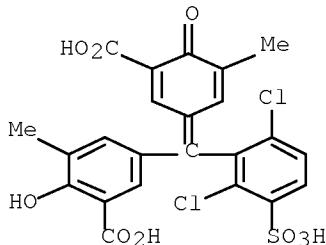
RN 115-41-3 HCPLUS

CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-(CA INDEX NAME)



RN 1667-99-8 HCPLUS

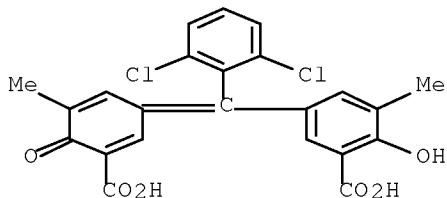
CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

RN 1796-92-5 HCPLUS

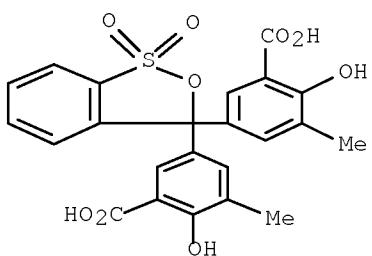
CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 3564-18-9 HCPLUS

CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

Pd

RN 7647-10-1 HCPLUS

CN Palladium chloride (PdCl₂) (CA INDEX NAME)

Cl—Pd—Cl

IC ICM G01N033-70

ICS G01N033-52

CC 9-15 (Biochemical Methods)

IT 115-41-3 1667-99-8, Chrome Azurol S

1796-92-5 3564-18-9, Eriochrome Cyanine R

7440-05-3, Palladium, uses 7440-50-8, Copper, uses

7647-10-1, Palladium chloride 7758-98-7, Copper sulfate,
uses

(test strip for determining creatinine)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
RECORD (5 CITINGS)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT

L49 ANSWER 2 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2004:36430 HCPLUS Full-text
DOCUMENT NUMBER: 140:103980
TITLE: Extraction separation of palladium(II) using
polyethylene glycol-ammonium sulfate-xylenol
orange
AUTHOR(S): Hu, Rui-guang; Lin, Qiu-yue; Liu, Tian-xi
CORPORATE SOURCE: Department of Chemistry, Zhejiang Normal
University, Jinhua, 321004, Peop. Rep. China
SOURCE: Fenxi Shiyanshi (2003), 22(6), 47-49
CODEN: FENSE4; ISSN: 1000-0720
PUBLISHER: Fenxi Shiyanshi Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

ED Entered STN: 16 Jan 2004

AB In polyethylene glycol-ammonium sulfate-water system, extraction behavior of the complexes of Pd(II) with extractants (XO, CPA III, Chromazarol S, Zincon, PAN-S) were investigated. The results indicated that in solution at pH 1.0 .apprx. 6.0 the complex of Pd(II) with XO was almost completely extracted by PEG phase, while extraction yield of Fe(II), Co(II), Zn(II) changed with pH, and Mn(II), Cd(II) were not extracted at all. Quant. separation of Pd(II) from ions of Fe(II), Co(II), Zn(II), Mn(II), Cd(II) in pH 1.0 .apprx. 2.0 (HClO₄) was performed.

IT 7440-05-3, Palladium, analysis

(extraction separation of palladium(II) using polyethylene glycol-ammonium sulfate-xylenol orange)

RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

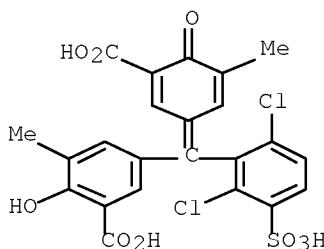
Pd

IT 1667-99-8

(extraction separation of palladium(II) using polyethylene glycol-ammonium sulfate-xylenol orange)

RN 1667-99-8 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

CC 79-4 (Inorganic Analytical Chemistry)
 Section cross-reference(s): 68
 IT 7439-89-6, Iron, analysis 7439-96-5, Manganese, analysis
 7440-05-3, Palladium, analysis 7440-43-9, Cadmium, analysis
 7440-48-4, Cobalt, analysis 7440-66-6, Zinc, analysis
 (extraction separation of palladium(II) using polyethylene glycol-ammonium sulfate-xylenol orange)
 IT 85-85-8, PAN 135-52-4, Zincon 1611-35-4, Xylenol orange
 1667-99-8
 (extraction separation of palladium(II) using polyethylene glycol-ammonium sulfate-xylenol orange)

L49 ANSWER 3 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:855556 HCPLUS Full-text

DOCUMENT NUMBER: 139:347692

TITLE: Determination of elements in body fluids and test kit including the necessary reagents for diagnosis of diseases caused by elemental imbalances

INVENTOR(S): Rupp, Michael E.

PATENT ASSIGNEE(S): Future Data, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|-----------------|----------|
| US 20030203495 | A1 | 20031030 | US 2003-423130 | 20030424 |
| US 6821786 | B2 | 20041123 | | |
| WO 2003091725 | A1 | 20031106 | WO 2003-US12911 | 20030425 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
 LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
 NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ,
 TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,

| | | | | |
|--|----|----------|-----------------|------------|
| NE, SN, TD, TG | | | | |
| AU 2003223735 | A1 | 20031110 | AU 2003-223735 | 20030425 |
| | | | <-- | |
| EP 1504257 | A1 | 20050209 | EP 2003-719936 | 20030425 |
| | | | <-- | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2005524071 | T | 20050811 | JP 2004-500061 | 20030425 |
| | | | <-- | |
| PRIORITY APPLN. INFO.: | | | US 2002-375566P | P 20020425 |
| | | | <-- | |
| | | | US 2003-423130 | A 20030424 |
| | | | <-- | |
| | | | WO 2003-US12911 | W 20030425 |
| | | | <-- | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 31 Oct 2003

AB A self-diagnostic test, a self-diagnostic test apparatus, and method of manufacturing a self-diagnostic test for screening for elemental mineral imbalances in a patient utilizing an anal. of the reaction of mineral specific reagents to a sample from a patient are provided. In one embodiment, the invention is directed to a test for those elements that occur naturally in the body. In such an embodiment, the invention may test for those elements that comprise about 0.001% of the body weight or less (microtrace), those elements that comprise about 4% of the body weight or less (trace), those elements that comprise up to 96% of the body weight (mass), or any combination of the above. A test strip includes series of reagent spots for the colorimetric determination of the individual elements.

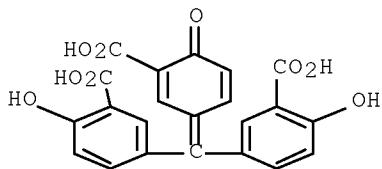
IT 7440-05-3, Palladium, analysis
(determination of elements in body fluids and test kit including the necessary reagents for diagnosis of diseaseses caused by elemental imbalances)

RN 7440-05-3 HCPLUS
CN Palladium (CA INDEX NAME)

Pd

IT 569-58-4, Aluminon 1667-99-8 7647-10-1
, Palladium chloride
(determination of elements in body fluids and test kit including the necessary reagents for diagnosis of diseaseses caused by elemental imbalances)

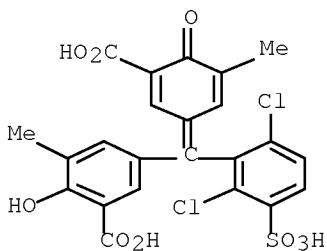
RN 569-58-4 HCPLUS
CN Benzoic acid, 3,3'-(3-carboxy-4-oxo-2,5-cyclohexadien-1-ylidene)methylene]bis[6-hydroxy-, ammonium salt (1:3) (CA INDEX NAME)



●3 NH₃

RN 1667-99-8 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

RN 7647-10-1 HCPLUS

CN Palladium chloride (PdCl₂) (CA INDEX NAME)

Cl—Pd—Cl

IC ICM G01N031-22

ICS G01N033-20

INCL 436074000; 422056000

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 4, 14

IT 7429-90-5, Aluminum, analysis 7429-91-6, Dysprosium, analysis
 7429-92-7, Einsteinium, analysis 7439-88-5, Iridium, analysis
 7439-89-6, Iron, analysis 7439-90-9, Krypton, analysis 7439-91-0,
 Lanthanum, analysis 7439-92-1, Lead, analysis 7439-93-2, Lithium,
 analysis 7439-94-3, Lutetium, analysis 7439-95-4, Magnesium,
 analysis 7439-96-5, Manganese, analysis 7439-97-6, Mercury,
 analysis 7439-98-7, Molybdenum, analysis 7439-99-8, Neptunium,
 analysis 7440-00-8, Neodymium, analysis 7440-01-9, Neon, analysis
 7440-02-0, Nickel, analysis 7440-03-1, Niobium, analysis
 7440-04-2, Osmium, analysis 7440-05-3, Palladium, analysis

| | | |
|----|---|--|
| | 7440-06-4, Platinum, analysis | 7440-07-5, Plutonium, analysis |
| | 7440-08-6, Polonium, analysis | 7440-10-0, Praseodymium, analysis |
| | 7440-11-1, Mendelevium, analysis | 7440-12-2, Promethium, analysis |
| | 7440-13-3, Protactinium, analysis | 7440-14-4, Radium, analysis |
| | 7440-15-5, Rhenium, analysis | 7440-16-6, Rhodium, analysis |
| | 7440-18-8, Ruthenium, analysis | 7440-19-9, Samarium, analysis |
| | 7440-20-2, Scandium, analysis | 7440-21-3, Silicon, analysis |
| | 7440-22-4, Silver, analysis | 7440-23-5, Sodium, analysis |
| | Strontium, analysis | 7440-24-6, Tantalum, analysis |
| | Technetium, analysis | 7440-25-7, Terbium, analysis |
| | Thallium, analysis | 7440-26-8, Thorium, analysis |
| | analysis | 7440-27-9, Tin, analysis |
| | 7440-32-6, Titanium, analysis | 7440-31-5, Tungsten, analysis |
| | 7440-34-8, Actinium, analysis | 7440-33-7, Americium, analysis |
| | 7440-36-0, Antimony, analysis | 7440-35-9, Arsenic, analysis |
| | 7440-39-3, Barium, analysis | 7440-38-2, Berkelium, analysis |
| | 7440-41-7, Beryllium, analysis | 7440-40-6, Boron, analysis |
| | 7440-43-9, Cadmium, analysis | 7440-42-8, Cerium, analysis |
| | 7440-46-2, Cesium, analysis | 7440-45-1, Chromium, analysis |
| | 7440-48-4, Cobalt, analysis | 7440-47-3, Copper, analysis |
| | Curium, analysis | 7440-50-8, Erbium, analysis |
| | analysis | 7440-51-9, Europium, analysis |
| | 7440-54-2, Gadolinium, analysis | 7440-52-0, Gallium, analysis |
| | 7440-56-4, Germanium, analysis | 7440-53-1, Gold, analysis |
| | 7440-58-6, Hafnium, analysis | 7440-55-3, Holmium, analysis |
| | 7440-61-1, Uranium, analysis | 7440-62-2, Vanadium, analysis |
| | 7440-63-3, Xenon, analysis | 7440-64-4, Ytterbium, analysis |
| | 7440-65-5, Yttrium, analysis | 7440-66-6, Zinc, analysis |
| | Zirconium, analysis | 7440-67-7, Astatine, analysis |
| | Bismuth, analysis | 7440-68-8, Calcium, analysis |
| | 7440-70-2, Californium, analysis | 7440-71-3, Fermium, analysis |
| | 7440-72-4, Francium, analysis | 7440-73-5, Indium, analysis |
| | 7440-74-6, Analysis | 7704-34-9, Sulfur, analysis |
| | 7723-14-0, Phenylmercury acetate | 7726-95-6, Phosphorus, analysis |
| | 72-48-0, Alizarin | 7782-41-4, Bromine, analysis |
| | 81-88-9, Rhodamine B | 7782-49-2, Fluorine, analysis |
| | 93-42-5, Thionalide | 7782-50-5, Selenium, analysis |
| | o-Phenylenediamine, biological studies | 10028-14-5, Chlorine, analysis |
| | 10043-92-2, Radon, analysis | 13494-80-9, Nobelium, analysis |
| | 53850-36-5, Rutherfordium, analysis | 53850-36-5, Tellurium, analysis |
| | (determination of elements in body fluids and test kit including the necessary reagents for diagnosis of diseaseses caused by elemental imbalances) | |
| IT | 54-64-8, Thiomersal | 60-10-6, Dithizone |
| | 62-38-4, Phenylmercury acetate | 61-73-4, Methylene blue |
| | 72-48-0, Alizarin | 66-71-7, 1,10-Phenanthroline |
| | 81-88-9, Rhodamine B | 75-17-2, Form-aldoxime |
| | 93-42-5, Thionalide | 81-64-1, Quinizarin |
| | o-Phenylenediamine, biological studies | 91-95-2, 3,3'-Diaminobenzidine |
| | 4-Chloro-o-phenylenediamine | 95-45-4, Dimethylglyoxime |
| | studies | 95-54-5, |
| | 107-27-7, Ethylmercury chloride | 95-83-0, |
| | biological studies | 106-50-3, p-Phenylenediamine, biological |
| | 129-16-8, Mercurochrome | studies |
| | 130-22-3, Alizarin red | 123-54-6, Acetylacetone, |
| | S | 135-52-4, Zincon |
| | 138-85-2, PCMB | 138-89-6, |
| | p-Nitroso-N,N-dimethylaniline | 140-22-7, Diphenylcarbazide |
| | 143-66-8, Kalibor | 147-84-2, biological studies |
| | 148-24-3, Oxine, biological studies | 148-18-5, Na-DDTC |
| | 149-45-1, Tiron | 148-25-4, Chromotropic acid |
| | acetate | 294-93-9D, 12-crown-4, derivs. |
| | 303-07-1, 2,6-Dihydroxybenzoic acid | 301-04-2, Lead |
| | 480-16-0, Morin | 458-37-7, Curcumin |
| | 492-18-2, Mersalyl | 484-11-7, Neocuproin |
| | Potassium silver cyanide | 491-33-8, Thiooxine |
| | 520-10-5, Neo-thorin | 496-74-2, Toluene-3,4-dithiol |
| | Diphenylcarbazone | 506-61-6, |
| | Crystal violet | 507-28-8, Tetraphenylarsonium chloride |
| | tetracyanide | 522-27-0, α -Furildioxime |
| | 541-09-3, Diacetatodioxouranium | 538-62-5, |
| | 554-77-8, PCMBS | 548-62-9, |
| | 562-76-5, Dipotassium platinum | |
| | 569-58-4, Aluminon | 569-61-9, Pararosaniline |

569-64-2, Malachite green 592-04-1, Mercury Cyanide (Hg(CN)2)
 592-63-2 603-48-5, Leuco crystal violet 633-03-4, Brilliant green
 637-31-0, Bindschedler's green leuco base 643-79-8, o-Phthalaldehyde
 771-97-1, 2,3-Diaminonaphthalene 773-76-2, 5,7-Dichlorooxine
 826-81-3, 2-Methyloxine 975-17-7, Phenylfluorone 979-88-4,
 Disodium 2,2'-bicinchoninate 1020-31-1, 3,5-Di-tert-butylcatechol
 1046-56-6, PDT 1072-71-5, Bismuthiol 1141-59-9, PAR 1149-16-2,
 Glyoxal bis(2-hydroxyanil) 1184-63-0, Europium triacetate
 1226-46-6 1251-85-0, Diantipyrylmethane 1308-96-9, Europium
 trioxide 1314-64-3, Uranyl sulfate 1600-27-7, Mercury acetate
 1611-35-4, Xylenol orange 1667-99-8 1668-00-4, Arsenazo
 III 1738-02-9, Sulfonazo III 1914-99-4, Chlorophosphonazo-III
 1945-78-4, Bis(2-benzothiazolyl)methane 1964-89-2, Dinitrosulfonazo
 III 2050-14-8, o,o'-Dihydroxyazobenzene 2103-73-3,
 Sulfochlorophenol-S 2235-25-8, Ethylmercury phosphate 2312-73-4,
 BPA 2390-59-2, Ethyl violet 3051-09-0, Murexide 3147-14-6,
 Calmagite 3449-05-6, Salicylideneamino-2-thiophenol 3627-04-1,
 Beryllon III 3682-35-7, TPTZ 3688-92-4, Thorin 4386-25-8,
 Lumogallion 4552-64-1, 3-Buten-2-one,
 1,1,1-trifluoro-4-mercapto-4-(2-thienyl)- 4733-39-5, Bathocuproin
 6098-81-3, o-Nitrophenylfluorone 6358-20-9,
 2-Nitroso-5-diethylaminophenol 7249-72-1 7487-94-7, Mercury
 chloride (HgCl2), biological studies 7647-10-1, Palladium
 chloride 7758-95-4, Lead chloride 7761-88-8, Silver nitrate,
 biological studies 7772-99-8, Tin chloride, biological studies
 7783-33-7 7791-29-9 10025-98-6, Dipotassium tetrachloropalladate
 10025-99-7, Dipotassium platinum tetrachloride 10035-10-6, Hydrogen
 bromide, biological studies 10042-88-3, Terbium chloride (TbCl3)
 10099-74-8, Lead nitrate 10102-05-3, Palladium nitrate 10102-06-4,
 Uranium dinitrate dioxide 10168-81-7, Gadolinium nitrate
 10361-83-8, Samarium trinitrate 10465-27-7, Samarium triacetate
 11098-84-3, Ammonium molybdate 13435-46-6, Barium chloranilate
 13472-45-2 13569-63-6, Rhenium trichloride 13682-61-6, Potassium
 tetrachloroaurate 13746-89-9 13766-44-4, Mercury sulfate
 13815-39-9, Dipotassium tetranitroplatinate 13823-29-5 13826-93-2,
 Dipotassium tetrabromopalladate 13967-50-5, Potassium auro cyanide
 14024-41-0, Potassium iridium chloride (K3IrCl6) 14096-51-6
 14178-30-4, syn-Phenyl-2-pyridylketoxime 14337-53-2, 5-Br-PADAP
 14337-54-3 14708-55-5 14708-99-7, Tris (1,10-phenanthroline
)iron(2+) 15189-51-2, Sodium tetrachloroaurate 15584-04-0,
 Arsenate 15702-05-3, Sodium iridium chloride (Na3IrCl6)
 16056-77-2, Gadolinium triacetate 16574-43-9, Bromopyrogallol red
 16761-04-9, 2-Nitroso-5-dimethylaminophenol 16871-60-6, Dipotassium
 hexachloroosmate(2-) 16905-14-9, Dipotassium hexaiodoplatinate
 16921-30-5, Dipotassium platinum hexachloride 16922-12-6, Ytterbium
 acetate 17654-88-5 19426-75-6, Potassium fluouranate(VI)
 (K3(UO2F5)) 19718-36-6, Dipotassium osmate 26035-31-4
 28048-33-1, Benzenesulfonic acid,
 4,4'-[3-(2-pyridyl)-as-triazine-5,6-diyl]di-, disodium salt
 29416-86-2, 1H-Perimidin-2-amine, hydrochloride 30136-15-3,
 Nitrocatechol 32266-60-7, Azomethine-H 33006-91-6, 5-Cl-PADAB
 33100-27-5D, 15-Crown-5, nitrophenylazo derivs. 35218-75-8, TPPS
 38673-65-3, Tetrakis(4-N-methylpyridyl)porphine 40835-97-0, Calcium
 bis[4-(1,1,3,3-tetramethylbutyl)phenyl] phosphate 42055-55-0
 50768-75-7, 4-(5-Bromo-2-pyridylazo)-1,3-diaminobenzene 55034-79-2,
 PV 65271-28-5, Dimethylsulfonazo-III 67708-10-5,
 2,4-Dinitro-1,8-naphthalenediol 69104-18-3 72833-87-5,
 2-(3,5-Dibromopyridylazo)-5-(dimethylamino)benzoic acid 73630-23-6,
 Quin 2 75964-78-2, Cesibor 79551-14-7, Ferene S 80459-15-0,
 2-Nitroso-5-(N-propyl-N-sulfopropylamino)phenol 81342-98-5,

Bis[2-(5-chloro-2-pyridylazo)-5-(diethylamino)phenol]cobalt(III) chloride 81608-06-2, 2-(5-Bromo-2-pyridylazo)-5-(N-propyl-N-sulfopropylamino)phenol 82138-69-0, TAMSMB 83104-85-2, Quin 2AM 83474-84-4, Samarium tetrachloride 83688-78-2, 2-(2-Benzothiazolylazo)-5-dimethylaminobenzoic acid 83907-40-8, SPQ 85079-16-9, 2-Thiophenesulfonic acid, 5,5',5'',5'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis-87035-61-8, 2-(5-Bromo-2-pyridylazo)-5-(N-propyl-N-sulfopropylamino)aniline 96314-96-4, Indo 1 96314-98-6, Fura 2 98645-85-3, Bathocuproine disulfonic acid disodium salt 98645-86-4, Batho-phenanthroline disulfonic acid disodium salt 100743-65-5, 4-(3,5-Dibromo-2-pyridylazo)-N-ethyl-N-sulfopropylaniline 102725-12-2D, Me derivs. 106868-21-7, 6,6-Dibenzyl-14-crown-4 108964-32-5, Fura 2AM 112926-02-0, Indo 1AM 121714-22-5, Fluo 3AM 123632-39-3, Fluo 3 127689-06-9, Dotite Alfusone 139542-74-8, 2-(5-Nitro-2-pyridylazo)-5-[N-propyl-N-(3-sulfopropyl) amino] phenol 151460-00-3, TTD-14-crown-4 162558-52-3, Quinolinium, 1-(2-ethoxy-2-oxoethyl)-6-methoxy-, bromide 181530-09-6, Acetic acid, [(2-methyl-8-[(4-methylphenyl)sulfonyl]amino]-6-quinolinyl]oxy-, ethyl ester 617691-88-0 618084-93-8 618086-59-2D, phospho derivs. 618104-70-4, Pyrogallol Red AM
(determination of elements in body fluids and test kit including the necessary reagents for diagnosis of diseaseses caused by elemental imbalances)

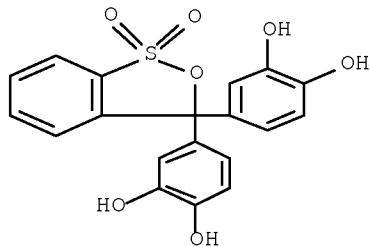
OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L49 ANSWER 4 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:90173 HCPLUS Full-text
DOCUMENT NUMBER: 132:259764
TITLE: The extraction chromatography of copper (II) with trioctylphosphine oxide
AUTHOR(S): Rokade, M. D.; Dhadke, P. M.
CORPORATE SOURCE: Inorganic Chemistry Laboratory, Department of Chemical Technology, University of Bombay, Mumbai, 400 019, India
SOURCE: Research Journal of Chemistry and Environment (1999), 3(3), 43-46
CODEN: RJCEF7; ISSN: 0972-0626
PUBLISHER: Research Journal of Chemistry and Environment
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 09 Feb 2000
AB The separation of copper by extraction chromatog. was studied using trioctylphosphine oxide (TOPO) absorbed on hydrophobic silica gel. The separation of copper from large number elements in binary mixts. was carried out by exploiting the difference in their extractability with TOPO at different concentration of HCl. It was also found possible to sep. copper from multicomponent mixture by using the difference in concentration of acids, with which they are eluted out of the stationary phase. The column performance as a function of flow rate and temperature was studied for the extraction of copper. The method was extended for the determination of copper in real samples.
IT 7440-05-3, Palladium, analysis
(copper determination in mixts. and alloys by extraction chromatog. with trioctylphosphine oxide and spectrophotometry)
RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

Pd

- IT 115-41-3, Pyrocatechol violet
 (copper determination in mixts. and alloys by extraction chromatog. with trioctylphosphine oxide and spectrophotometry)
- RN 115-41-3 HCPLUS
- CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



- CC 79-4 (Inorganic Analytical Chemistry)
 Section cross-reference(s): 56
- IT 7429-90-5, Aluminum, analysis 7439-89-6, Iron, analysis 7439-96-5,
 Manganese, analysis 7440-02-0, Nickel, analysis 7440-05-3
 , Palladium, analysis 7440-28-0, Thallium, analysis 7440-31-5,
 Tin, analysis 7440-32-6, Titanium, analysis 7440-36-0, Antimony,
 analysis 7440-43-9, Cadmium, analysis 7440-48-4, Cobalt, analysis
 7440-50-8, Copper, analysis 7440-66-6, Zinc, analysis
 (copper determination in mixts. and alloys by extraction chromatog. with
 trioctylphosphine oxide and spectrophotometry)
- IT 78-50-2, Trioctylphosphine oxide 79-40-3, Rubeanic acid
 115-41-3, Pyrocatechol violet 302-04-5, Thiocyanate, uses
 525-05-3, Nitroso-R salt 1141-59-9, PAR 3051-09-0, Murexide
 (copper determination in mixts. and alloys by extraction chromatog. with
 trioctylphosphine oxide and spectrophotometry)
- REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L49 ANSWER 5 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1997:482217 HCPLUS Full-text
 DOCUMENT NUMBER: 127:225740
 ORIGINAL REFERENCE NO.: 127:43915a, 43918a
 TITLE: Formation of binary, binucleating and mixed metal
 complexes of catechol violet
 AUTHOR(S): Upadhyay, Poonam; Singh, Mamta; Vimal, Rashmi;
 Nayan, Ram
 CORPORATE SOURCE: Department of Chemistry, Hindu College, Moradabad,
 244 001, India
 SOURCE: Journal of the Indian Chemical Society (1997), 74(5), 367-372

CODEN: JICSAH; ISSN: 0019-4522

PUBLISHER: Indian Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

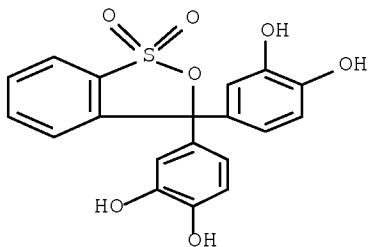
ED Entered STN: 02 Aug 1997

AB PH-metric studies on interaction of NiII, CuII, ZnII, PdII, AgI and CdII with 3, 4', 4'-trihydroxyfuchsome-2''-sulfonic acid (catechol violet, CAV) have been carried out in aqueous solution at 25° and an ionic strength of 0.1 M KNO₃. Studies reveal the formation of the species MH₂A, MHA, MA (M = NiII, CuII, ZnII, PdII, AgI and CdII); PdA(OH)₃-; M(H₂A)₂, M(H₂A)(HA), M(HA)₂ (M = NiII, CuII, ZnII, CdII); M(HA)(A) (M = ZnII, CdII); M₂A (M = NiII, CuII, ZnII, PdII, CdII); M₂A(OH) (M = CuII, ZnII, PdII, CdII); M₂A(OH)₂ (M = ZnII, CdII); CuNiA, CuZnA; PdNiA, PdCuA, PdZnA, CuNiA(OH), CuZnA(OH), PdZnA(OH), CuNiA(OH)₂, CuZnA(OH)₂ in the corresponding metal-ligand mixts. for which equilibrium consts. have been evaluated.

IT 115-41-3D, Catechol violet, metal complexes
 7440-05-3D, Palladium, catechol violet complexes, properties
 (formation of binary, binuclear and mixed metal complexes of catechol violet)

RN 115-41-3 HCPLUS

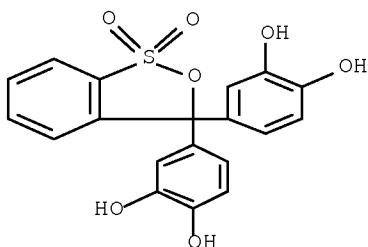
CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-(CA INDEX NAME)



RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 115-41-3, Catechol violet
 (proton-ligand dissociation constant of catechol violet)
 RN 115-41-3 HCPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-(CA INDEX NAME)



CC 68-3 (Phase Equilibria, Chemical Equilibria, and Solutions)
 IT 115-41-3D, Catechol violet, metal complexes 7440-02-0D,
 Nickel, catechol violet complexes, properties 7440-05-3D,
 Palladium, catechol violet complexes, properties 7440-22-4D, Silver,
 catechol violet complexes, properties 7440-43-9D, Cadmium, catechol
 violet complexes, properties 7440-50-8D, Copper, catechol violet
 complexes, properties 7440-66-6D, Zinc, catechol violet complexes,
 properties
 (formation of binary, binuclear and mixed metal complexes of
 catechol violet)
 IT 115-41-3, Catechol violet
 (proton-ligand dissociation constant of catechol violet)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
 RECORD (1 CITINGS)

L49 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1996:437026 HCAPLUS Full-text
 DOCUMENT NUMBER: 125:184290
 ORIGINAL REFERENCE NO.: 125:34193a,34196a
 TITLE: Determination of trace gold and palladium in
 geological samples by atomic absorption
 spectrometry with separation and enrichment of
 chromeazurol-s chelate forming resin
 AUTHOR(S): Bao, Changli; Li, Zengwen; Zhang, Kai; Shun,
 Qizhi; Chen, Yue Zhang
 CORPORATE SOURCE: Dep. of Applied Chemistry, Changchun Univ. of
 Earth Sciences, Changchun, 130026, Peop. Rep.
 China
 SOURCE: Microchemical Journal (1996), 54(1), 1-7
 CODEN: MICJAN; ISSN: 0026-265X
 PUBLISHER: Academic
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 24 Jul 1996
 AB A method for the synthesis of chromeazurol-s (CA-S) chelate forming resin and
 the determination of traces of Au and Pd in geol. samples is presented. Au
 and Pd in solution are enriched on chromeazurol-s chelate forming resin column
 in pH 1 HCl without adsorbing other base metal ions, and are eluted with 3%
 acidic thiourea. The eluate is determined directly by flame atomic absorption
 spectrometry. Operating parameters were studied. The relative standard
 deviations ($n = 6$) of Au and Pd are 8.50 and 7.24%.
 IT 7440-05-3, Palladium, analysis
 (determination of trace gold and palladium in geol. samples by atomic
 absorption spectrometry with separation and enrichment of chromeazurol-s
 chelate forming resin)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

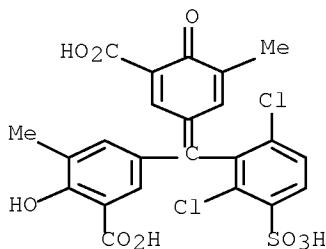
Pd

IT 1667-99-8, Chromeazurol-s

(determination of trace gold and palladium in geol. samples by atomic absorption spectrometry with separation and enrichment of chromeazurol-s chelate forming resin)

RN 1667-99-8 HCAPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

CC 79-6 (Inorganic Analytical Chemistry)

Section cross-reference(s): 53

IT 7440-05-3, Palladium, analysis 7440-57-5, Gold, analysis

(determination of trace gold and palladium in geol. samples by atomic absorption spectrometry with separation and enrichment of chromeazurol-s chelate forming resin)

IT 1667-99-8, Chromeazurol-s

(determination of trace gold and palladium in geol. samples by atomic absorption spectrometry with separation and enrichment of chromeazurol-s chelate forming resin)

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

L49 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:847834 HCAPLUS Full-text

DOCUMENT NUMBER: 124:20458

ORIGINAL REFERENCE NO.: 124:3727a,3730a

TITLE: Thiolometry

AUTHOR(S): Ryabushko, O. P.

CORPORATE SOURCE: T. G. Shevchenko Kiev State Univ., Kiev, Ukraine

SOURCE: Khimiya i Tekhnologiya Vody (1994),

16(4), 409-15

CODEN: KTVODL; ISSN: 0204-3556

PUBLISHER: Naukova Dumka

DOCUMENT TYPE: Journal

LANGUAGE: Russian

ED Entered STN: 11 Oct 1995

AB Thiolometry is chelatometric titration using S-bonding reagents with thiol and thione functional groups, which are more selective than complexones. The author has formulated principles of development of the theory and practice of application of S-containing reagents in titrimetric anal. as titrants; reagents for masking, isolation, concentration; selective metallo-chromic indicators and indicator ion-selective electrodes based on metal chelates with S-containing reagents as ion-active substances.

IT 7440-05-3, Palladium, analysis
 (thiolometric S-bonding reagents with thiol and thione functional groups for chelating titration metal detns.)

RN 7440-05-3 HCPLUS

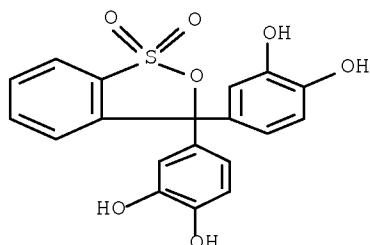
CN Palladium (CA INDEX NAME)

Pd

IT 115-41-3, Pyrocatechin violet
 (thiolometric S-bonding reagents with thiol and thione functional groups for chelating titration metal detns.)

RN 115-41-3 HCPLUS

CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)

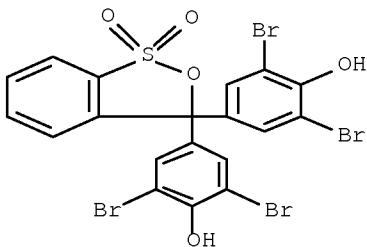


CC 79-3 (Inorganic Analytical Chemistry)

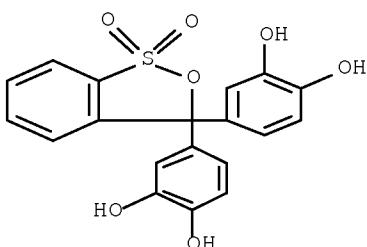
IT 7439-89-6, Iron, analysis 7439-92-1, Lead, analysis 7439-96-5,
 Manganese, analysis 7439-97-6, Mercury, analysis 7440-02-0,
 Nickel, analysis 7440-05-3, Palladium, analysis
 7440-22-4, Silver, analysis 7440-28-0, Thallium, analysis
 7440-31-5, Tin, analysis 7440-43-9, Cadmium, analysis 7440-50-8,
 Copper, analysis 7440-57-5, Gold, analysis 7440-66-6, Zinc,
 analysis 7440-69-9, Bismuth, analysis 7440-74-6, Indium, analysis
 (thiolometric S-bonding reagents with thiol and thione functional groups for chelating titration metal detns.)

IT 60-10-6, Dithizone 60-10-6D, Dithizone, sulfonated
 115-41-3, Pyrocatechin violet 1141-59-9,
 4(2-Pyridylazo)resorcinol 1611-35-4, Xylenol orange 1772-02-7,
 Sulfarsazen 1787-61-7, Eriochrome Black T 32389-54-1,
 Pyridylazonaphthol 32638-88-3, Pyrogallol red
 (thiolometric S-bonding reagents with thiol and thione functional groups for chelating titration metal detns.)

DOCUMENT NUMBER: 121:291506
 ORIGINAL REFERENCE NO.: 121:53027a, 53030a
 TITLE: Triethanolamine as a releasing agent for controlling interferences in the atomic absorption spectrometric determination of gold and its use as a collector for the flotation of gold
 AUTHOR(S): Ghazy, Shaban E.; Kabil, Mohamed A.; Mostafa, Mohamed A.
 CORPORATE SOURCE: Fac. Sci., Mansoura Univ., Mansoura, Egypt
 SOURCE: Journal of Analytical Atomic Spectrometry (1994), 9(8), 857-60
 CODEN: JASPE2; ISSN: 0267-9477
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 10 Dec 1994
 AB The interfering effects of a range of organic and inorg. species on the atomic absorption signal of gold were studied. These interferences were completely eliminated by adding 6 mmol/L triethanolamine (TEA) to both the sample and standard solns. The role of TEA was extended to the extraction of gold, with 100% recovery, from aqueous solns., using oleic acid as a surfactant at a pH of 0.5-2.0. A mechanism for the effect of TEA in the flotation and in the atomic absorption study was suggested. A simple, sensitive and rapid procedure for flotation and the atomic absorption spectrometric determination of gold in synthetic mixts. and natural waters was elaborated.
 IT 115-39-9, Bromophenol blue 115-41-3, Catechol violet 7440-05-3, Palladium, analysis (interferant; triethanolamine for control of interferences in gold determination by atomic absorption)
 RN 115-39-9 HCPLUS
 CN Phenol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[2,6-dibromo- (CA INDEX NAME)]



RN 115-41-3 HCPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis- (CA INDEX NAME)



RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)
 Section cross-reference(s): 61
 IT 56-40-6, Glycine, analysis 60-00-4, Ethylenediaminetetraacetic acid, analysis 97-05-2, Sulfosalicylic acid 115-39-9, Bromophenol blue 115-41-3, Catechol violet 139-13-9, Nitrilotriacetic acid 623-59-6, Acetyl methyl urea 7440-02-0, Nickel, analysis 7440-05-3, Palladium, analysis 7440-06-4, Platinum, analysis 7440-16-6, Rhodium, analysis 7440-18-8, Ruthenium, analysis 7440-48-4, Cobalt, analysis 13291-61-7, trans-1,2-Diaminocyclohexane-N,N,N',N'-tetraacetic acid (interferant; triethanolamine for control of interferences in gold determination by atomic absorption)
 OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

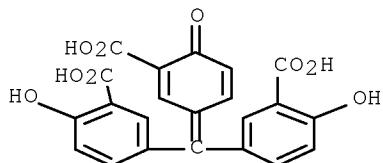
L49 ANSWER 9 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1994:686721 HCPLUS Full-text
 DOCUMENT NUMBER: 121:286721
 ORIGINAL REFERENCE NO.: 121:52234h,52235a
 TITLE: Analytical applications using aurintricarboxylic acid for spectrophotometric determination of iron (III), copper (II) and palladium (II). Estimation of iron in some pharmaceutical preparations
 AUTHOR(S): El-Sheikh, R.; Shalaby, A.; Zaky, M.
 CORPORATE SOURCE: Faculty Science and Pharmaceutical Chemistry, Zagazig University, Zagazig, Egypt
 SOURCE: Egyptian Journal of Chemistry (1993), 36(1), 55-60
 CODEN: EGJCA3; ISSN: 0367-0422
 PUBLISHER: National Information and Documentation Centre
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 10 Dec 1994
 AB A spectrophotometric study of the reaction between Aurintricarboxylic acid and Fe (III), Cu(II), and Pd(II) ions have shown that 1:1 and 1:2 violet water-soluble-complexes were formed at pH 8. The organic reagent was found to be very suitable for spectrophotometric determination of Fe (III), Cu(II) and Pd(II) up to 10.800, 6.40 and 12.50 ppm, resp. The application of the ligand as an indicator in the spectrophotometric titration of Fe(III), Cu(II), and Pd(II) with EDTA and the interference of various cations and anions were reported. This method was applied to some pharmaceutical preps. for estimation of iron.
 IT 7440-05-3, Palladium, analysis (determination of iron, copper and palladium in pharmaceutical preps. by spectrophotometry using aurintricarboxylic acid)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 4431-00-9, Aurintricarboxylic acid
 (determination of iron, copper and palladium in pharmaceutical preps. by spectrophotometry using aurintricarboxylic acid)

RN 4431-00-9 HCAPLUS

CN Benzoic acid, 3,3'-(3-carboxy-4-oxo-2,5-cyclohexadien-1-ylidene)methylene]bis[6-hydroxy- (CA INDEX NAME)



CC 64-4 (Pharmaceutical Analysis)

IT 7439-89-6, Iron, analysis 7440-05-3, Palladium, analysis
 7440-50-8, Copper, analysis
 (determination of iron, copper and palladium in pharmaceutical preps. by spectrophotometry using aurintricarboxylic acid)

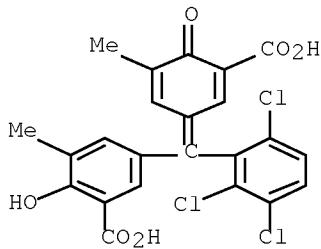
IT 4431-00-9, Aurintricarboxylic acid
 (determination of iron, copper and palladium in pharmaceutical preps. by spectrophotometry using aurintricarboxylic acid)

L49 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1994:207456 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 120:207456
 ORIGINAL REFERENCE NO.: 120:36455a,36458a
 TITLE: Eriochrome Azurol G (CAG) as a spectrophotometric analytical reagent
 AUTHOR(S): Gorka, Piotr; Kowalski, Stanislaw
 CORPORATE SOURCE: Silesian Tech. Univ., Gliwice, Pol.
 SOURCE: Zeszyty Naukowe Politechniki Slaskiej, Chemia (1993), 1145(127), 81-9
 CODEN: ZNSCAM; ISSN: 0372-9494
 DOCUMENT TYPE: Journal
 LANGUAGE: Polish
 ED Entered STN: 16 Apr 1994
 AB The usability of CAG as spectrophotometric anal. reagent was based on comparison of the method of Y determination with CAG and with similar reagents such as Chrome Azurol S, Eriochrome Cyanine R, and Eriochrome Azurol B in a binary system metal-CAG and with addition of cetyltrimethylammonium bromide. Conditions for spectrophotometric determination of Ti(IV), Fe(III), Pd(II), Co(II), and Ni(II) were also established.

IT 3267-40-1, Eriochrome Azurol G
 (as spectrophotometric reagent)

RN 3267-40-1 HCAPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,3,6-trichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

IT 7440-05-3, Palladium, analysis
 (determination of, Eriochrome Azurol G in spectrophotometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-3 (Inorganic Analytical Chemistry)
 IT 3267-40-1, Eriochrome Azurol G
 (as spectrophotometric reagent)
 IT 7439-89-6, Iron, analysis 7440-02-0, Nickel, analysis
 7440-05-3, Palladium, analysis 7440-32-6, Titanium, analysis
 7440-48-4, Cobalt, analysis 7440-65-5, Yttrium, analysis
 (determination of, Eriochrome Azurol G in spectrophotometric)

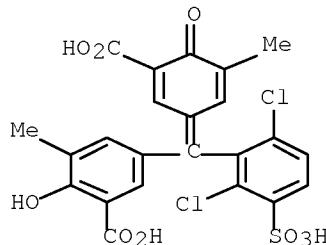
L49 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1991:16758 HCAPLUS Full-text
 DOCUMENT NUMBER: 114:16758
 ORIGINAL REFERENCE NO.: 114:2839a,2842a
 TITLE: Study on chromogenic reaction of palladium(II)
 with Chrome Azurol B-cetyltrimethylammonium
 acetate-Triton X-100 and its application
 AUTHOR(S): Yang, Dingguo
 CORPORATE SOURCE: Dep. Text. Chem., Northwest Text. Inst., Xian,
 710048, Peop. Rep. China
 SOURCE: Fenxi Shiyanshi (1990), 9(3), 66-7
 CODEN: FENSE4; ISSN: 1000-0720
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 ED Entered STN: 12 Jan 1991
 AB Pd was determined in Pd concs. by measuring the absorbance at 345 nm of the complex formed by reaction with Chrome Azurol S (I) in presence of cetyltrimethyl(carboxymethyl)ammonium chloride (II) and Triton X-100 (III) in pH 6.8 phthalate buffer solution. The absorbance was measured 20 min after the mixing of the reagents. The molar absorptivity of Pd-I-II-III complex was 1.3 + 105. L/mol/cm. The ratio of Pd:I was 1:1 in the complex. There was no finite composition of II and III in the complex. The absorbance was stable

for 24 h. Beer's law was obeyed in the concentration range 0-4.0 µg Pd/25 mL.
The relative error was ≤5%.

IT 7440-05-3, Palladium, analysis
(determination of, in palladium concs. by spectrophotometry)
RN 7440-05-3 HCAPLUS
CN Palladium (CA INDEX NAME)

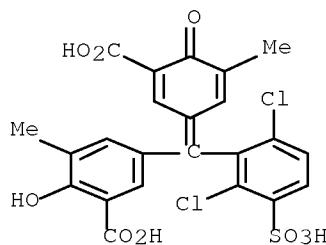
Pd

IT 1667-99-8, Chrome Azurol S
(in palladium determination by spectrophotometry)
RN 1667-99-8 HCAPLUS
CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 3564-17-8D, palladium complex 7440-05-3D,
Palladium, Chrome Azurol S complex
(molar absorptivity of)
RN 3564-17-8 HCAPLUS
CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



RN 7440-05-3 HCAPLUS

CN Palladium (CA INDEX NAME)

Pd

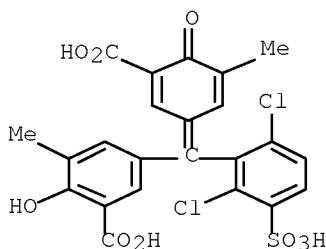
CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, Palladium, analysis
 (determination of, in palladium concs. by spectrophotometry)
 IT 1667-99-8, Chrome Azurol S 9002-93-1, Triton X-100
 24000-75-7
 (in palladium determination by spectrophotometry)
 IT 3564-17-8D, palladium complex 7440-05-3D,
 Palladium, Chrome Azurol S complex
 (molar absorptivity of)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
 RECORD (1 CITINGS)

L49 ANSWER 12 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1990:228948 HCPLUS Full-text
 DOCUMENT NUMBER: 112:228948
 ORIGINAL REFERENCE NO.: 112:38411a,38414a
 TITLE: Determination of palladium in catalyst using
 palladium(II)-Chrome Azurol S-zephiramine system
 AUTHOR(S): Huang, Dejiang; Guo, Jin
 CORPORATE SOURCE: Beijing Inst. Chem. Technol., Beijing, Peop. Rep.
 China
 SOURCE: Huaxue Shiji (1989), 11(6), 373-4
 CODEN: HUSHDR; ISSN: 0258-3283
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 ED Entered STN: 09 Jun 1990
 AB Pd(II) reacts with Chrome Azurol S and zephiramine to form a ternary complex
 and Pd was determined by measuring the absorbances of the complex at 620 nm
 (molar absorptivity 6.5 + 104 L mol⁻¹ cm⁻¹). Beer's law is obeyed for 0-04 µg
 Pd/25 mL. Pd was determined in catalysts by the method and the results were
 satisfactory.
 IT 7440-05-3, Palladium, analysis
 (determination of, by spectrophotometry)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 1667-99-8, Chrome Azurol S
 (in palladium determination by spectrophotometry)
 RN 1667-99-8 HCPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-
 ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-,
 sodium salt (1:3) (CA INDEX NAME)

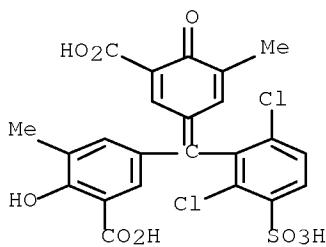


●3 Na

IT 3564-17-8D, complex with palladium zephiramine
 7440-05-3D, Palladium, ternary complex with Chrome Azurol S
 and zephiramine
 (spectrum of)

RN 3564-17-8 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, Palladium, analysis
 (determination of, by spectrophotometry)
 IT 139-08-2, Zephiramine 1667-99-8, Chrome Azurol S
 (in palladium determination by spectrophotometry)
 IT 3564-17-8D, complex with palladium zephiramine
 7440-05-3D, Palladium, ternary complex with Chrome Azurol S
 and zephiramine 16287-71-1D, Zephiramine ion, complex with palladium
 and Chrome Azurol S
 (spectrum of)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L49 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1990:210150 HCAPLUS Full-text

DOCUMENT NUMBER: 112:210150

ORIGINAL REFERENCE NO.: 112:35299a,35302a

TITLE: A sensitive spectrophotometric method for the determination of palladium with Eriochrome Azurol G and cetyltrimethylammonium chloride

AUTHOR(S): Uesugi, Katsuya; Miyawaki, Mitsuo

CORPORATE SOURCE: Dep. Chem., Himeji Inst. Technol., Himeji, 671-22, Japan

SOURCE: Microchemical Journal (1990), 41(1), 78-83

CODEN: MICJAN; ISSN: 0026-265X

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 26 May 1990

AB A sensitive spectrophotometric method for the determination of palladium was studied, using Eriochrome Azurol G (EAG) as a reagent. Palladium reacts very sensitively with EAG in the presence of cetyltrimethylammonium chloride (CTMA) to form a blue complex. The palladium complex has maximum absorbance at pH 3.5-4.8 and at 645 nm. Beer's law is obeyed over the range 0.1-1.6 ppm palladium. The molar absorptivity is 73,800 L mol⁻¹ cm⁻¹ at 645 nm. The mole ratio of palladium and EAG in the complex is estimated to be 1:3 in the presence of CTMA. Only scandium interferes when sodium fluoride is used as a masking agent.

IT 7440-05-3D, Palladium, Eriochrome Azurol G complex, ion associate with cetyltrimethylammonium 25747-13-1D, palladium complex, ion associate with cetyltrimethylammonium
(UV-visible absorption spectrum of)

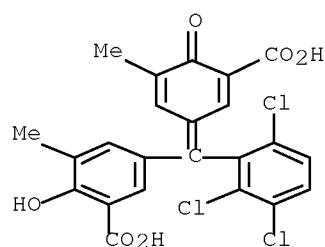
RN 7440-05-3 HCAPLUS

CN Palladium (CA INDEX NAME)

Pd

RN 25747-13-1 HCAPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,3,6-trichlorophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



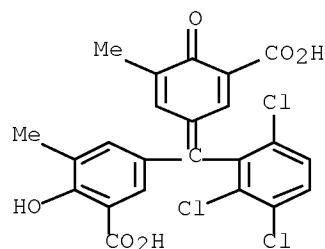
IT 7440-05-3, Palladium, analysis
(determination of, by spectrophotometry)

RN 7440-05-3 HCAPLUS

CN Palladium (CA INDEX NAME)

Pd

- IT 3267-40-1, Eriochrome Azurol G
 (in determination of palladium by spectrophotometry)
- RN 3267-40-1 HCAPLUS
- CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,3,6-trichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

- CC 79-6 (Inorganic Analytical Chemistry)
- IT 6899-10-1D, Cetyltrimethylammonium, ion associate with palladium-Eriochrome Azurol G complex 7440-05-30,
 Palladium, Eriochrome Azurol G complex, ion associate with cetyltrimethylammonium 25747-13-10, palladium complex, ion associate with cetyltrimethylammonium
 (UV-visible absorption spectrum of)
- IT 7440-05-3, Palladium, analysis
 (determination of, by spectrophotometry)
- IT 112-02-7, Cetyltrimethylammonium chloride 3267-40-1,
 Eriochrome Azurol G
 (in determination of palladium by spectrophotometry)
- OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L49 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1989:146801 HCAPLUS Full-text
 DOCUMENT NUMBER: 110:146801
 ORIGINAL REFERENCE NO.: 110:24055a,24058a
 TITLE: Spectrophotometric study on the color reaction of complex of palladium with Chrome Azurol B and cetyltrimethylammonium bromide
 AUTHOR(S): Yang, Dingguo; Wu, Yunping
 CORPORATE SOURCE: Dep. Text. Chem., North-West Inst. Text., Xian, Peop. Rep. China
 SOURCE: Fenxi Huaxue (1988), 16(7), 651-3
 CODEN: FHHHDT; ISSN: 0253-3820
 DOCUMENT TYPE: Journal

LANGUAGE: Chinese

ED Entered STN: 15 Apr 1989

AB A color reaction of palladium with Chrome Azurol B (CAB) and cetyltrimethylammonium bromide (CTMAB) has been studied spectrophotometrically. In a buffer solution of KHC₈H₄O₄-NaOH (pH 6.8), Pd forms a green complex with CAB and CTMAB. The molar absorptivity of the complex is 8.1×10^4 L mol⁻¹ cm⁻¹ at 635 nm. The composition ratio of Pd to CAB to CTMAB is 1:1:3. Beer's law is obeyed for Pd in the range of 0-22 µg/25 mL. The method is simple and highly selective and has been successfully applied to the determination of Pd in ores.

IT 7440-05-3, Palladium, analysis
(determination of, by spectrophotometry)

RN 7440-05-3 HCAPLUS

CN Palladium (CA INDEX NAME)

Pd

IT 7440-05-3D, Palladium, Chrome Azurol B complex, ion associate with cetyltrimethylammonium 15012-28-9, Chrome Azurol B (in palladium determination by spectrophotometry)

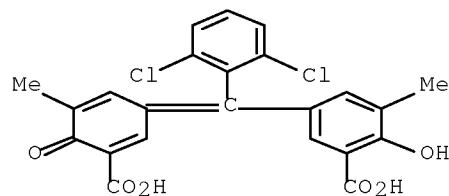
RN 7440-05-3 HCAPLUS

CN Palladium (CA INDEX NAME)

Pd

RN 15012-28-9 HCAPLUS

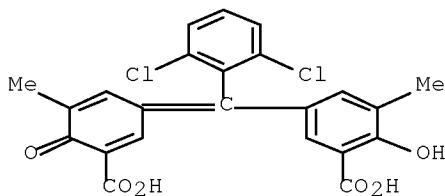
CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



IT 15012-28-9D, palladium complex, ion associate with cetyltrimethylammonium
(spectrum of)

RN 15012-28-9 HCAPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



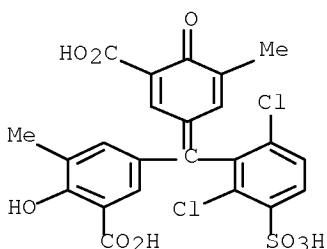
- CC 79-6 (Inorganic Analytical Chemistry)
IT 7440-05-3, Palladium, analysis
(determination of, by spectrophotometry)
IT 57-09-0, Cetyltrimethylammonium bromide 7440-05-3D,
Palladium, Chrome Azurol B complex, ion associate with
cetyltrimethylammonium 15012-28-9, Chrome Azurol B
(in palladium determination by spectrophotometry)
IT 15012-28-9D, palladium complex, ion associate with
cetyltrimethylammonium
(spectrum of)

L49 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1986:526332 HCAPLUS Full-text
DOCUMENT NUMBER: 105:126332
ORIGINAL REFERENCE NO.: 105:20227a,20230a
TITLE: Color reaction of the ternary complex of palladium
with Chrome Azurol S and cationic surfactant
AUTHOR(S): Sum, Shusheng; Li, Li
CORPORATE SOURCE: Beijing Univ., Beijing, Peop. Rep. China
SOURCE: Fenxi Ceshi Tongbao (1985), 4(3), 14-17
CODEN: FCTOE8; ISSN: 1000-3800
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
ED Entered STN: 03 Oct 1986
AB The color reactions of Pd(II), Chrome Azurol S (I) and alkyltrimethylammonium
bromide, where alkyl is dodecyl, tetradecyl, hexadecyl (II) and octadecyl
(III) in HOAc-NaOAc buffer solution at pH .apprx.5 were studied. Among the
examined surfactants, II and III showed higher sensitivity for the color
reaction with molar absorptivities (at absorption maximum 636 nm) of 1.3 + 105
and 1.19 + 105 L mol⁻¹ cm⁻¹, resp. Beer's law was obeyed in the range 0-25 µg
Pd/25 mL in the presence of II. Ni and Pt(IV) also form complexes with I and
II with absorption maximum at 512 and 587 nm, resp., thus, Pd can be
determined in the presence of Ni and Pt(IV) without the interferences.
IT 7440-05-3, analysis
(determination of, Chrome Azurol S and cationic surfactants in
spectrophotometric)
RN 7440-05-3 HCAPLUS
CN Palladium (CA INDEX NAME)

Pd

- IT 1667-99-8
(in determination of palladium by spectrophotometry)
RN 1667-99-8 HCAPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)

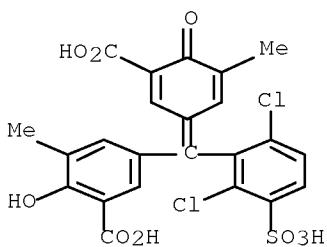


●3 Na

IT 3564-17-8D, palladium complex, alkyltrimethylammonium bromide ion associate 7440-05-3D, Chrome Azurol S complex, alkyltrimethylammonium bromide ion associate (spectra of)

RN 3564-17-8 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



RN 7440-05-3 HCPLUS
CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)

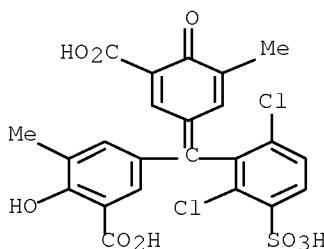
IT 7440-05-3, analysis
(determination of, Chrome Azurol S and cationic surfactants in spectrophotometric)
IT 57-09-0 1119-94-4 1119-97-7 1120-02-1 1667-99-8
(in determination of palladium by spectrophotometry)
IT 3564-17-8D, palladium complex, alkyltrimethylammonium bromide ion associate 6899-10-1D, ion associate with palladium-Chrome

Azurol S complex 7440-05-3D, Chrome Azurol S complex,
 alkyltrimethylammonium bromide ion associate 15461-40-2D, ion associate
 with palladium-Chrome Azurol S complex
 (spectra of)

L49 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1986:417573 HCAPLUS Full-text
 DOCUMENT NUMBER: 105:17573
 ORIGINAL REFERENCE NO.: 105:2789a,2792a
 TITLE: Resin spot test technique for simultaneous
 microgram detection of nitrogen- and
 sulfur-containing organic compounds
 AUTHOR(S): Grdinic, Vladimir; Spoljaric, Gordana; Oresic,
 Laila Stefanini
 CORPORATE SOURCE: Fac. Pharm. Biochem., Univ. Zagreb, Zagreb,
 Yugoslavia
 SOURCE: Acta Pharmaceutica Jugoslavica (1985),
 35(4), 265-74
 CODEN: APJUA8; ISSN: 0001-6667
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 13 Jul 1986
 AB Simple, reliable, and sensitive detection of N and S in organic compds. by the
 resin spot test technique is described. N is identified as cyanide with Pd-
 PAR resin. The identification of S as sulfide, is based on the catalytically
 enhanced reduction of I with sulfide on the resin. N and S together are
 identified as Fe(III)-thiocyanate complex on the resin. Amberlite IRA-400, in
 the Pd-PAR and chloride form, is used as the suitable resin. The limits of
 detection, concentration, dilution, and the exponent of sensitivity are
 presented for 4 anal. systems. The anal. procedure was tested on 72 substances
 and the information contents were compared.
 IT 7440-05-3D, pyridylazoresorcinol complex
 (Amberlite IRA-400 modified with, in detection of nitrogen- and
 sulfur-containing organic compds. by spot test)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 1667-99-8
 (detection of, resin spot test for)
 RN 1667-99-8 HCAPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-
 ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-,
 sodium salt (1:3) (CA INDEX NAME)



●3 Na

CC 80-5 (Organic Analytical Chemistry)
 IT 1141-59-9D, palladium complex 7440-05-3D,
 pyridylazoresorcinol complex
 (Amberlite IRA-400 modified with, in detection of nitrogen- and
 sulfur-containing organic compds. by spot test)

| | | | | | | | |
|----|-------------|-----------------|-------------|-----------------|-----------|-----------|----------|
| IT | 50-44-2 | 52-26-6 | 54-85-3 | 57-67-0 | 59-88-1 | 60-10-6 | 60-11-7 |
| | 60-35-5, | analysis | 60-56-0 | 62-55-5 | 62-56-6, | analysis | 63-74-1 |
| | 66-32-0 | 66-71-7 | 68-35-9 | 71-73-8 | 72-14-0 | 79-19-6 | 79-40-3 |
| | 85-41-6 | 85-85-8 | 88-74-4 | 91-56-5 | 93-42-5 | 97-05-2 | 97-52-9 |
| | 97-77-8 | 98-96-4 | 99-61-6 | 99-65-0 | 99-99-0 | 100-02-7, | analysis |
| | 100-19-6 | 103-84-4 | 106-47-8, | analysis | 110-85-0, | analysis | |
| | 120-72-9, | analysis | 121-89-1 | 125-30-4 | 127-69-5 | 127-79-7 | |
| | 130-22-3 | 130-89-2 | 131-91-9 | 140-89-6 | 147-85-3, | analysis | |
| | 148-18-5 | 148-24-3, | analysis | 148-25-4 | 149-45-1 | 316-42-7 | |
| | 328-39-2 | 366-18-7 | 496-74-2 | 526-08-9 | 536-17-4 | 536-33-4 | |
| | 541-69-5 | 546-88-3 | 548-62-9 | 556-88-7 | 580-15-4 | 598-41-4 | |
| | 885-11-0 | 912-60-7 | 1083-48-3 | 1667-99-8 | 2218-94-2 | | |
| | 2637-34-5 | 5349-80-4 | 5469-69-2 | 6968-22-5 | 7283-41-2 | | |
| | 7704-34-9D, | organic compds. | 7727-37-9D, | organic compds. | 7775-14-6 | | |
| | 25486-11-7 | | | | | | |

(detection of, resin spot test for)

L49 ANSWER 17 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1986:230569 HCPLUS Full-text
 DOCUMENT NUMBER: 104:230569
 ORIGINAL REFERENCE NO.: 104:36483a,36486a
 TITLE: Application of xanthine derivatives for analytical chemistry. Part XLVI. A color reaction of 1,2-diphenols based on colored complex formation with phenylfluorone and iron(III) and its application to the assay of catecholamines in pharmaceutical preparations
 AUTHOR(S): Fujita, Yoshikazu; Mori, Itsuo; Fujita, Kinuko; Kitano, Shoko; Tanaka, Takeshi
 CORPORATE SOURCE: Osaka Coll. Pharm., Osaka, 580, Japan
 SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(12), 5385-92
 CODEN: CPBTAL; ISSN: 0009-2363
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 27 Jun 1986
 AB The color reaction between 1,2-diphenols, xanthine dye phenylfluorone (I) [975-17-7] and Fe(III) was used for the spectrophotometric determination (630 nm) of the diphenols. The optimum and stable color absorbance of the complex

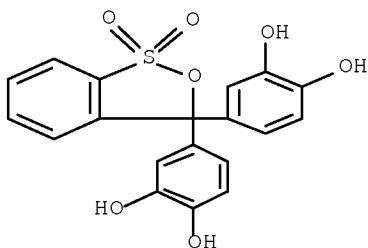
was observed at pH 8.9-9.9. Sensitivity was the highest with 5% Brij 35 [9002-92-0]. The use of 1:1 I-Fe(III) ratio was the best in terms of reactivity and stability at room temperature among metal ions examined, Cu(II) and Fe(II) interfered with the anal.; phosphate and citrate gave pos. errors and oxine, salicylic acid albumin and chondroitin sulfate gave neg. errors. The 1,2-diphenolic function with free adjacent positions was essential for the formation of the colored complex. The molar absorptivity of norepinephrine [51-41-2], a catecholamine, was 1.7 + 105 dm³ mol⁻¹ cm⁻¹. The method was also used for the anal. of norepinephrine and DOPA [59-92-7] in injections, isoproterenol [7683-59-2] in capsules and methyl-DOPA [555-30-6] in tablets (recoveries 95-102%). A color test is described for the detection of catecholamine on a spot plate.

IT 115-41-3 1667-99-8

(diphenols determination by spectrophotometry with iron and)

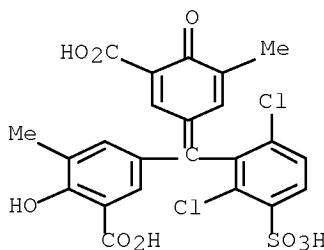
RN 115-41-3 HCPLUS

CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-(CA INDEX NAME)



RN 1667-99-8 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 7440-05-3, uses and miscellaneous

(diphenols determination by spectrophotometry with organic reagents in relation to)

RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

Pd

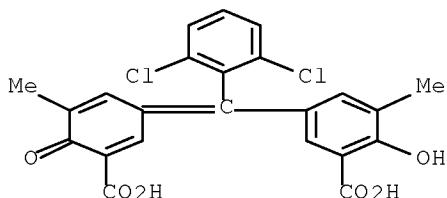
CC 64-3 (Pharmaceutical Analysis)
 Section cross-reference(s): 1, 9
 IT 66-71-7 115-41-3 130-22-3 148-25-4 1141-59-9
 1667-99-8 1668-00-4 2103-64-2 2320-44-7 32638-88-3
 (diphenols determination by spectrophotometry with iron and)
 IT 13408-62-3 7429-90-5, uses and miscellaneous 7439-96-5, uses and
 miscellaneous 7439-98-7, uses and miscellaneous 7440-04-2, uses
 and miscellaneous 7440-05-3, uses and miscellaneous
 7440-32-6, uses and miscellaneous 7440-45-1, uses and miscellaneous
 7440-48-4, uses and miscellaneous 7440-50-8, uses and miscellaneous
 7440-56-4, uses and miscellaneous 7440-62-2, uses and miscellaneous
 7440-66-6, uses and miscellaneous 7440-69-9, uses and miscellaneous
 (diphenols determination by spectrophotometry with organic reagents in
 relation to)
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS
 RECORD (2 CITINGS)

L49 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1986:56803 HCAPLUS Full-text
 DOCUMENT NUMBER: 104:56803
 ORIGINAL REFERENCE NO.: 104:9053a,9056a
 TITLE: Micelle solubilizing effect of sodium
 dodecylsulfate on color reactions between
 Eriochrome Azurol B and metal ions
 AUTHOR(S): Zheng, Yongxi; Chen, Depu
 CORPORATE SOURCE: Dep. Chem. Eng., Tsinghua Univ., Beijing,
 Peop. Rep. China
 SOURCE: Huaxue Xuebao (1985), 43(9), 868-72
 CODEN: HHPA4; ISSN: 0567-7351
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 ED Entered STN: 23 Feb 1986
 AB Color reactions of Be, Al, Cu(II), and Pd(II) with Eriochrome Azurol B were
 enhanced by solubilization in SDS micelles. There is no H bonding between SDS
 and the dye over a wide pH range. The neg. elec. field of SDS inhibits dye
 ionization increasing pKa values (2.65-3.57, 4.65-5.45, 11.8-12.20 for pKa1,
 pKa2, pKa3, resp.). The Be:dye ratio in the complex increased from 1:1 to 1:2
 in the presence of CTAB, but SDS left the ratio unchanged at 1:1.
 IT 7440-05-3, reactions
 (color reaction of divalent, with Eriochrome Azurol B, in SDS
 micelles)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 1796-92-5
 (color reactions of, in SDS micelles)
 RN 1796-92-5 HCAPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-
 ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt

(1:2) (CA INDEX NAME)



●2 Na

- CC 66-2 (Surface Chemistry and Colloids)
 Section cross-reference(s): 79
 IT 7440-05-3, reactions 7440-50-8, reactions
 (color reaction of divalent, with Eriochrome Azurol B, in SDS
 micelles)
 IT 1796-92-5
 (color reactions of, in SDS micelles)

L49 ANSWER 19 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1983:432452 HCPLUS [Full-text](#)
 DOCUMENT NUMBER: 99:32452
 ORIGINAL REFERENCE NO.: 99:4975a,4978a
 TITLE: Spectrophotometric method for determining
 palladium(II) using Eriochrome Azurol B and
 cetyltrimethylammonium bromide
 AUTHOR(S): Gregorowicz, Z.; Gorka, P.; Kowalski, S.; Cebula,
 J.
 CORPORATE SOURCE: Inst. Anal. Gen. Chem., Silesian Tech. Univ.,
 Gliwice, Pol.
 SOURCE: Mikrochimica Acta (1983), 2(3-4), 181-6
 CODEN: MIACAQ; ISSN: 0026-3672
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 ED Entered STN: 12 May 1984
 AB Pd(II) was determined spectrophotometrically by reaction with Eriochrome
 Azural B (I) and cetyltrimethylammonium bromide (II) at pH 5.5 to form a
 ternary 1:2:4 (Pd-I-II) complex. The absorbance was measured at 645 nm (molar
 absorptivity = 1.15 + 105). Beer's law was obeyed for 2-10 µg Pd/10 mL. The
 sensitivity was 0.93 + 10-3 Pd/cm². The stability of the complex was 6.3 +
 1011. The effect of diverse ions was studied.
 IT 7440-05-3, analysis
 (determination of, cetyltrimethylammonium bromide and eriochrome Azural B
 in spectrophotometric)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

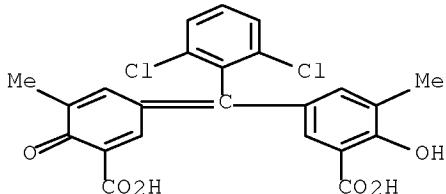
Pd

IT 1796-92-5

(in palladium determination by spectrophotometry)

RN 1796-92-5 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)

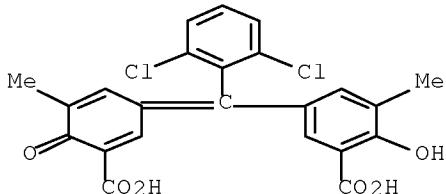


●2 Na

IT 1796-92-5D, palladium complex 7440-05-3D,
cetyltrimethylammonium and Eriochrome Azural B complex
(spectrum and stability constant of)

RN 1796-92-5 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 7440-05-3 HCPLUS
CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)

IT 7440-05-3, analysis

(determination of, cetyltrimethylammonium bromide and eriochrome Azural B in spectrophotometric)

IT 57-09-0 1796-92-5
 (in palladium determination by spectrophotometry)
 IT 1796-92-5D, palladium complex 6899-10-1D, palladium
 complex 7440-05-3D, cetyltrimethylammonium and Eriochrome
 Azural B complex
 (spectrum and stability constant of)

L49 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1983:190870 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 98:190870
 ORIGINAL REFERENCE NO.: 98:28803a,28806a
 TITLE: Ternary complexes of some elements with catechol
 violet and cetyltrimethylammonium
 AUTHOR(S): Tikhonov, V. N.; Mikhailova, A. M.; Myasnikova, I.
 A.; Vanyurkina, V. I.
 CORPORATE SOURCE: Chuvash State Univ., Cheboksary, USSR
 SOURCE: Zhurnal Analiticheskoi Khimii (1983),
 38(2), 216-20
 CODEN: ZAKHA8; ISSN: 0044-4502

DOCUMENT TYPE: Journal
 LANGUAGE: Russian

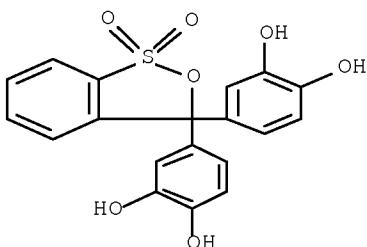
ED Entered STN: 12 May 1984

AB The metals M (Cu(II), Bi, V(IV), Mo, W, Fe(III), and Pd) can be determined spectrophotometrically as their ternary complexes with catechol violet (I) and cetyltrimethylammonium(II) at λ_{max} 600-680 nm and molar absorptivities of (2.4-5.3) + 104. V(IV) and Fe(III) form complex with M:I:II ratios of 1:2:2, and the others, complexes with 1:1:2 ratios. The permissible levels of 15 other elements and anions for these detns. are tabulated.

IT 115-41-3D, transition metal complexes
 (catechol violet and cetyltrimethylammonium ternary complexes,
 spectra of)

RN 115-41-3 HCAPLUS

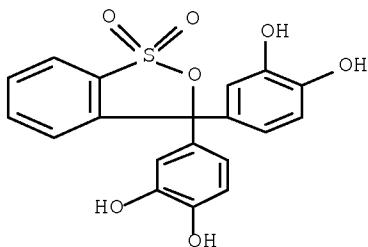
CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



IT 7440-05-3, analysis
 (determination of, catechol violet and cetyltrimethylammonium in
 spectrophotometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 115-41-3
 (in transition metal determination by spectrophotometry)
 RN 115-41-3 HCPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



IT 7440-05-3D, catechol violet and cetyltrimethylammonium
 ternary complex
 (spectrum of)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)
 Section cross-reference(s): 73
 IT 115-41-3D, transition metal complexes
 (catechol violet and cetyltrimethylammonium ternary complexes,
 spectra of)
 IT 7439-89-6, analysis 7439-98-7, analysis 7440-05-3,
 analysis 7440-33-7, analysis 7440-50-8, analysis 7440-62-2,
 analysis 7440-69-9, analysis
 (determination of, catechol violet and cetyltrimethylammonium in
 spectrophotometric)
 IT 115-41-3 6899-10-1
 (in transition metal determination by spectrophotometry)
 IT 7439-89-6D, catechol violet and cetyltrimethylammonium ternary complex
 7439-98-7D, catechol violet and cetyltrimethylammonium ternary complex
 7440-05-3D, catechol violet and cetyltrimethylammonium ternary
 complex 7440-33-7D, catechol violet and cetyltrimethylammonium
 ternary complex 7440-50-8D, catechol violet and
 cetyltrimethylammonium ternary complex 7440-62-2D, catechol violet
 and cetyltrimethylammonium ternary complex 7440-69-9D, catechol
 violet and cetyltrimethylammonium ternary complex
 (spectrum of)

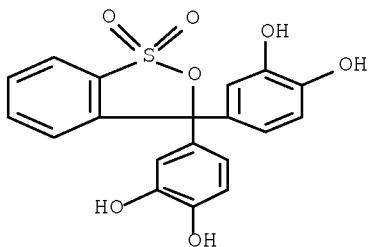
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS
 RECORD (2 CITINGS)

L49 ANSWER 21 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1983:83010 HCPLUS Full-text
 DOCUMENT NUMBER: 98:83010

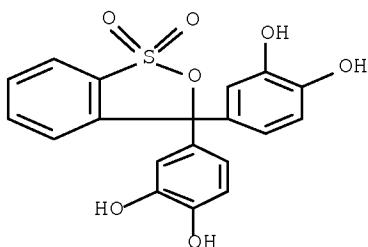
ORIGINAL REFERENCE NO.: 98:12513a,12516a
 TITLE: Spectrophotometric determination of platinum metals. VII. Determination of palladium with bromopyrogallol red and pyrocatechol violet
 AUTHOR(S): Egermaierova, J.; Cermakova, L.; Suk, V.
 CORPORATE SOURCE: Fac. Nat. Sci., Charles Univ., Prague, 128 40/2, Czech.
 SOURCE: Microchemical Journal (1983), 28(1), 10-19
 CODEN: MICJAN; ISSN: 0026-265X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB Optimum conditions were found for the reaction of Pd(II) with bromopyrogallol red (I) and pyrocatechol violet (II), and the effect of a cationic surfactant, Septonex, on these reactions was investigated. On this basis, new sensitive spectrophotometric detns. of Pd as its complexes with I and II alone or in the presence of Septonex, were developed and evaluated and the effect of other ions was estimated
 IT 7440-05-3, analysis
 (determination of, bromopyrogallol red and pyrocatechol violet and Septonex in spectrophotometric)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 115-41-3
 (in determination of palladium by spectrophotometry)
 RN 115-41-3 HCPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



IT 115-41-3D, palladium complexes, ion assocs. with Septonex
 7440-05-3D, bromopyrogallol red and pyrocatechol violet
 complexes, ion assocs. with Septonex
 (spectra of)
 RN 115-41-3 HCPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

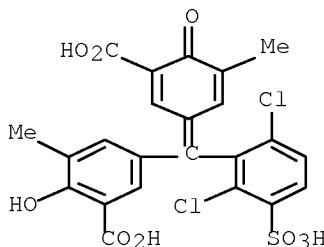
CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, analysis
 (determination of, bromopyrogallol red and pyrocatechol violet and Septonex
 in spectrophotometric)
 IT 115-41-3 10567-02-9 16574-43-9
 (in determination of palladium by spectrophotometry)
 IT 115-41-3D, palladium complexes, ion assocs. with Septonex
 7440-05-3D, bromopyrogallol red and pyrocatechol violet
 complexes, ion assocs. with Septonex 14565-92-5D, ion assocs. with
 palladium complexes with bromopyrogallol red and pyrocatechol violet
 16574-43-9D, palladium complexes, ion assocs. with Septonex
 (spectra of)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
 RECORD (1 CITINGS)

L49 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1983:82865 HCAPLUS Full-text
 DOCUMENT NUMBER: 98:82865
 ORIGINAL REFERENCE NO.: 98:12493a,12496a
 TITLE: Spectrophotometric studies of the formation of
 complexes of some metals with Chromazurol S
 AUTHOR(S): Tikhonov, V. N.
 CORPORATE SOURCE: I. N. Ul'yanov Chuvash State Univ., Cheboksary,
 USSR
 SOURCE: Zhurnal Analiticheskoi Khimii (1982),
 37(11), 1960-5
 CODEN: ZAKHA8; ISSN: 0044-4502
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 ED Entered STN: 12 May 1984
 AB The color reactions of Chromazurol S with Cu(II), Be, Ti(IV), Zr, V(IV),
 Fe(III), and Pd(II) were studied. The optimum pH of complexation (4.4-6.8),
 metal/ligand ratios (1:1 and 2:1), and spectral characteristics of the
 complexes ($\lambda_{max} = 535-610$, $\epsilon = 1.40 + 104-6.46 + 104$) are given. The effect
 of acetates and acidity on the absorbance of the complexes was studied. The
 conditions for photometric detns. of the metals are discussed, e.g. the buffer
 types.
 IT 7440-05-3, analysis

(determination of, by spectrophotometry, Chromazurol S in)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 1667-99-8DP, metal complexes
 (formation and spectra of)
 RN 1667-99-8 HCPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 7440-05-3DP, Chromazurol S complexes
 (formation and spectrum of)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

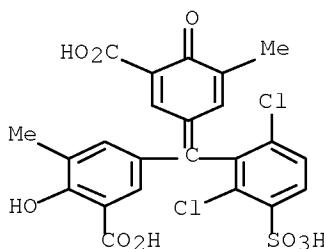
CC 79-1 (Inorganic Analytical Chemistry)
 Section cross-reference(s): 68
 IT 7439-89-6, analysis 7440-05-3, analysis 7440-32-6,
 analysis 7440-41-7, analysis 7440-50-8, analysis 7440-62-2,
 analysis 7440-67-7, analysis
 (determination of, by spectrophotometry, Chromazurol S in)
 IT 1667-99-8DP, metal complexes
 (formation and spectra of)
 IT 7439-89-6DP, Chromazurol S complexes 7440-05-3DP,
 Chromazurol S complexes 7440-32-6DP, Chromazurol S complexes
 7440-41-7DP, Chromazurol S complexes 7440-50-8DP, Chromazurol S
 complexes 7440-62-2DP, Chromazurol S complexes 7440-67-7DP,
 Chromazurol S complexes
 (formation and spectrum of)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS

L49 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1982:228139 HCAPLUS Full-text
 DOCUMENT NUMBER: 96:228139
 ORIGINAL REFERENCE NO.: 96:37577a,37580a
 TITLE: Palladium ternary complex with Chrome Azurol S and cetyltrimethylammonium bromide and cetylpyridinium bromide
 AUTHOR(S): Kant, Ravi; Srivastava, Rajesh; Prakash, Om
 CORPORATE SOURCE: Dep. Chem., Univ. Allahabad, Allahabad, India
 SOURCE: Croatica Chemica Acta (1981), 54(4), 465-72
 CODEN: CCACAA; ISSN: 0011-1643
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB Formation of green ternary complexes of Pd with Chrome Azurol S (I) and cetyltrimethylammonium (CTA) bromide or cetylpyridinium (CP) bromide at pH 4.6-5.6 is described. The Pd-I-CTA or CP ratio in the complexes is 1:1:2 as established by Job's method of continuous variations and by the mol ratio method using absorbance data. Strict control of exptl. conditions is essential for employing these methods for the determination of composition. The ternary systems obey Beer's law for 0.053-2.98 ppm Pd. A high molar absorptivity (Pd-I-CTA, 5.25 + 10⁴; Pd-I-CP, 6.16 + 10⁴ mol⁻¹ cm⁻¹) and Sandell sensitivity (0.002 µg cm²) were obtained at 620 nm. A spectrophotometric method is proposed using these ternary complexes for microdetn. of Pd. The method is sensitive, precise, and selective. The effect of various cations and anions was studied. The mode of formation and structures of the ternary complexes are discussed.
 IT 7440-05-3, analysis
 (determination of, Chrome Azurol S and cetyltrimethylammonium or cetylpyridinium bromide in spectrophotometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 1667-99-8
 (in determination of palladium by spectrophotometry)
 RN 1667-99-8 HCAPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)

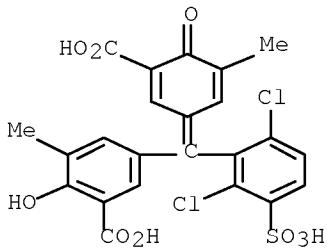


●3 Na

CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, analysis
 (determination of, Chrome Azurol S and cetyltrimethylammonium or
 cetylpyridinium bromide in spectrophotometric)
 IT 57-09-0 140-72-7 1667-99-8
 (in determination of palladium by spectrophotometry)

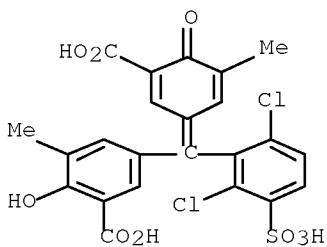
L49 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1981:218950 HCAPLUS Full-text
 DOCUMENT NUMBER: 94:218950
 ORIGINAL REFERENCE NO.: 94:35675a,35678a
 TITLE: Spectrophotometric study of ternary complexes of
 some metals with Chromazurol S and
 cetyltrimethylammonium
 AUTHOR(S): Tikhonov, V. N.; Aleksandrova, N. P.
 CORPORATE SOURCE: I. N. Ul'yanov Chuvash State Univ., Cheboksary,
 USSR
 SOURCE: Zhurnal Analiticheskoi Khimii (1981),
 36(2), 242-7
 CODEN: ZAKHA8; ISSN: 0044-4502
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 ED Entered STN: 12 May 1984
 AB The formation of ternary complexes of Cu(II), Ti(IV), Zr(IV), V(V), Fe(III),
 Pd(II) with Chromazurol S (I) and cetyltrimethylammonium (II) was examined.
 The M:I ratio in these compds. was 1:2. A 4-fold excess II is recommended for
 full color development. A spectrophotometric method was developed for Pd(II)
 determination in activation solns., which are actually a mixture of H_2PdCl_4
 and SnCl_2 . The effect of Sn is eliminated by the addition of NH_4F . Optimum
 conditions exist at 0.05M NH_4F , 0.05% I, 0.1% II, and pH 4.5. A 1000-fold
 excess Mg and Cd; 400-fold excess Ti(III); 100-fold excess Ca, Sr, Zn and
 Mn(II); 50-fold excess La and Pb; 10-fold excess Y, Sn(IV), Hg(II), Cr(III),
 Mo, Co, and Ni; and equal amts. of In and W do not interfere. Equal amts. of
 Cu, Be, Al, Ga, Sc, Sn(II), Ti(IV), Zr, Bi, V(IV), and Fe(III) interfere.
 IT 7440-05-3, analysis
 (determination of, Chromazurol S and cetyltrimethylammonium in
 spectrophotometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

IT 1667-99-8
 (in determination of palladium by spectrophotometry)
 RN 1667-99-8 HCPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 3564-17-8D, transition metal complexes
 (spectra of)
 RN 3564-17-8 HCPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



IT 7440-05-3D, Chromazurol S complexes, ion associate with cetyltrimethylammonium
 (spectrum of)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

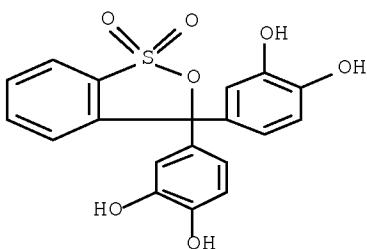
Pd

CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, analysis

(determination of, Chromazurol S and cetyltrimethylammonium in spectrophotometric)
IT 57-09-0 1667-99-8
(in determination of palladium by spectrophotometry)
IT 3564-17-8D, transition metal complexes 6899-10-1D, ion associate with transition metal complexes
(spectra of)
IT 7439-89-6D, Chromazurol S complexes, ion associate with cetyltrimethylammonium 7440-05-3D, Chromazurol S complexes, ion associate with cetyltrimethylammonium 7440-32-6D, Chromazurol S complexes, ion associate with cetyltrimethylammonium 7440-50-8D, Chromazurol S complexes, ion associate with cetyltrimethylammonium 7440-62-2D, Chromazurol S complexes, ion associate with cetyltrimethylammonium 7440-67-7D, Chromazurol S complexes, ion associate with cetyltrimethylammonium
(spectrum of)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

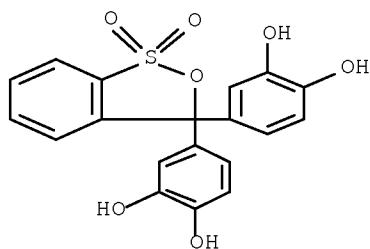
L49 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1979:432196 HCAPLUS Full-text
DOCUMENT NUMBER: 91:32196
ORIGINAL REFERENCE NO.: 91:5139a,5142a
TITLE: Pyrocatechol violet as a complexometric indicator in the presence of cetyltrimethylammonium
AUTHOR(S): Tikhonov, V. N.; Stepanova, T. Ya.
CORPORATE SOURCE: Chuvash State Univ., Cheboksary, USSR
SOURCE: Zhurnal Analiticheskoi Khimii (1979),
34(3), 426-31
CODEN: ZAKHA8; ISSN: 0044-4502
DOCUMENT TYPE: Journal
LANGUAGE: Russian
ED Entered STN: 12 May 1984
AB Complex formation of 27 elements with pyrocatechol violet (I) in the presence and absence of cetyltrimethylammonium bromide (II) was studied. The use of the ternary complex involving I and II allows a more sensitive and contrasting complexometric titration than with I alone. Procedures were developed for the complexometric determination of Fe in ferromanganese, Cu in alloys, and Al in an antifriction alloy by using I and II mixts. as indicators.
IT 115-41-3
(complexometric indicator system containing cetyltrimethylammonium bromide and)
RN 115-41-3 HCAPLUS
CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-(CA INDEX NAME)



IT 7440-05-3, analysis
 (determination of, cetyltrimethylammonium and pyrocatechol violet indicator system in complexometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 115-41-3D, metal complexes
 (spectra of)
 RN 115-41-3 HCAPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



IT 7440-05-3D, cetyltrimethylammonium and pyrocatechol violet complex
 (spectrum of)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-3 (Inorganic Analytical Chemistry)
 IT 115-41-3
 (complexometric indicator system containing cetyltrimethylammonium bromide and)
 IT 7440-05-3, analysis 7440-20-2, analysis 7440-55-3,
 analysis 7440-69-9, analysis 7440-74-6, analysis
 (determination of, cetyltrimethylammonium and pyrocatechol violet indicator system in complexometric)
 IT 115-41-3D, metal complexes 6899-10-1D, metal complexes
 (spectra of)
 IT 7429-90-5D, cetyltrimethylammonium and pyrocatechol violet complex
 7439-89-6D, cetyltrimethylammonium and pyrocatechol violet complex
 7439-98-7D, cetyltrimethylammonium and pyrocatechol violet complex
 7440-05-3D, cetyltrimethylammonium and pyrocatechol violet complex
 7440-20-2D, cetyltrimethylammonium and pyrocatechol violet complex
 7440-32-6D, cetyltrimethylammonium and pyrocatechol violet complex

complex 7440-33-7D, cetyltrimethylammonium and pyrocatechol violet
 complex 7440-50-8D, cetyltrimethylammonium and pyrocatechol violet
 complex 7440-55-3D, cetyltrimethylammonium and pyrocatechol violet
 complex 7440-62-2D, cetyltrimethylammonium and pyrocatechol violet
 complex 7440-67-7D, cetyltrimethylammonium and pyrocatechol violet
 complex 7440-69-9D, cetyltrimethylammonium and pyrocatechol violet
 complex 7440-74-6D, cetyltrimethylammonium and pyrocatechol violet
 complex

(spectrum of)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L49 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1979:158717 HCAPLUS Full-text

DOCUMENT NUMBER: 90:158717

ORIGINAL REFERENCE NO.: 90:25117a,25120a

TITLE: Development of new extraction agents for separation of rare radioactive elements

AUTHOR(S): Hala, J.; Navratil, O.; Prihoda, J.; Smola, J.

CORPORATE SOURCE: Prir. Fak., Univ. Jana Ev. Purkyne, Brno, Czech.

SOURCE: Report (1977), CS-INIS-202, 60 pp.

Avail.: Prirodved. Fak., Univ. J. E. Purkyne, Brno, Czech

From: INIS Atomindex 1978, 9(24), Abstr. No. 416802

DOCUMENT TYPE: Report

LANGUAGE: Czech

ED Entered STN: 12 May 1984

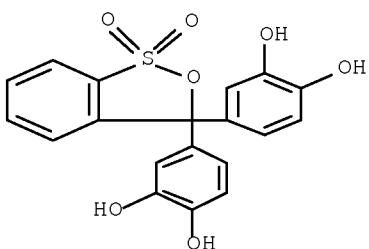
AB Certain transition elements, such as Rh and Pd, may be recovered from waste solns. produced in spent fuel reprocessing. The extraction of Pd was studied by using S compds. of the sulfide and sulfoxide types, and the effects were investigated of the individual factors on Pd distribution between the aqueous and the organic phases. The possibility of separating Hf in the form of extractable complexes was tested on several systems. Studied in more detail were mainly the complexes of Hf with pyrocatechol violet, Xylenol Orange, and Bu₃PO₄. The extraction of other metals, mainly of Sc, Eu, and In was investigated in detail in the system acid aqueous phase - organophosphinic acids solution in benzene.

IT 115-41-3

(extracting agent, for metal from radioactive waste)

RN 115-41-3 HCAPLUS

CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



IT 7440-05-3DP, isotopes, preparation
 (separation of, from radioactive waste solution by extraction)

RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 71-6 (Nuclear Technology)
 Section cross-reference(s): 61
 IT 115-41-3 126-73-8, uses and miscellaneous 1611-35-4
 (extracting agent, for metal from radioactive waste)
 IT 7440-05-3DP, isotopes, preparation 7440-16-6DP, isotopes,
 preparation 7440-20-2DP, isotopes, preparation 7440-53-1DP,
 isotopes, preparation 7440-58-6DP, isotopes, preparation
 7440-74-6DP, isotopes, preparation
 (separation of, from radioactive waste solution by extraction)

L49 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1978:539801 HCAPLUS Full-text

DOCUMENT NUMBER: 89:139801

ORIGINAL REFERENCE NO.: 89:21520h,21521a

TITLE: Mixed-ligand complexes of some elements with
 pyrocatechol violet and cetylpyridinium chloride

AUTHOR(S): Chernova, R. K.; Kharlamova, L. N.; Belousova, V.
 V.; Kulapina, E. G.; Sumina, E. G.

CORPORATE SOURCE: Saratov State Univ., Saratov, USSR

SOURCE: Zhurnal Analiticheskoi Khimii (1978),

33(5), 858-64

CODEN: ZAKHA8; ISSN: 0044-4502

DOCUMENT TYPE: Journal

LANGUAGE: Russian

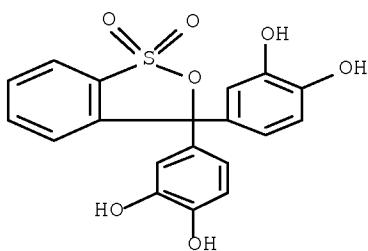
ED Entered STN: 12 May 1984

AB The formation of mixed-ligand complexes of 16 elements with pyrocatechol
 violet (I) and cetylpyridinium (II) was studied in acid and alkaline media in
 order to find optimum conditions of the anal. system and to clarify the nature
 of the interaction. For the model systems M-I-II, the stoichiometric ratio of
 the components in the mixed-ligand complex is 1:1:2 for M = W and Sn and 1:2:4
 for M = Ti and Ge. The formation of an ionic associate takes place as a
 result of the interaction of a pos. charged N atom of II with the neg. charged
 I groups (the sulfogroup and ionized hydroxy groups). Optimum pH for the
 formation of the I-II associate is 7.5. The instability constant for the 1:2
 I-II ion associate was calculated. New spectrophotometric procedures for the
 determination of Sn and Ti were developed. At pH 2.0, 400-fold excess Ni(II),
 Co(II), and Cu(II), 200-fold Cr(III), PO43-, F-, and sulfosalicylate, 100-fold
 Zn(II) and Mn(II), 50-fold oxalate, and 5-fold V(V), do not interfere in the
 Sn determination; W(VI), Fe(III), Mo(VI), Ti(IV), Ge(IV), Mn(VII), and Cr(VI)
 interfere. Beer's law is obeyed for 10-98 µg Sn/25 mL. In the determination
 of Ti optimum conditions exist in a 0.005M H2SO4 medium at a 5-fold excess of
 II with regard to I. Beer's law is obeyed for 5.0-25.0 µg Ti/mL. Co(II), 200-
 fold; Al(III), and Zn(II) 100-fold; F-, tartrate, oxalate, and PO43- 50-fold;
 and Cu(II) 30-fold excess do not interfere. Equimolar Fe(III) and any
 concentration of Mo and W interfere.

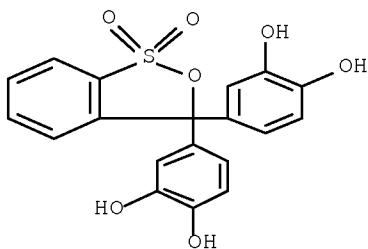
IT 115-41-3
 (in determination of tin and titanium by spectrophotometry)

RN 115-41-3 HCAPLUS

CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



IT 115-41-3D, metal complexes
 (spectra of)
 RN 115-41-3 HCPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-
 (CA INDEX NAME)



IT 7440-05-3D, cetylpyridinium and pyrocatechol violet complex
 (spectrum of)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)
 IT 115-41-3 123-03-5
 (in determination of tin and titanium by spectrophotometry)
 IT 115-41-3D, metal complexes 7773-52-6D, metal complexes
 (spectra of)
 IT 7429-90-5D, cetylpyridinium and pyrocatechol violet complex
 7439-98-7D, cetylpyridinium and pyrocatechol violet complex
 7440-05-3D, cetylpyridinium and pyrocatechol violet complex
 7440-31-5D, cetylpyridinium and pyrocatechol violet complex
 7440-32-6D, cetylpyridinium and pyrocatechol violet complex
 7440-33-7D, cetylpyridinium and pyrocatechol violet complex
 7440-41-7D, cetylpyridinium and pyrocatechol violet complex
 7440-43-9D, cetylpyridinium and pyrocatechol violet complex
 7440-48-4D, cetylpyridinium and pyrocatechol violet complex
 7440-50-8D, cetylpyridinium and pyrocatechol violet complex

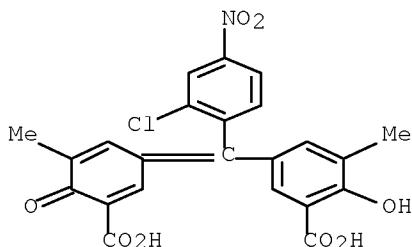
7440-56-4D, cetylpyridinium and pyrocatechol violet complex
 7440-66-6D, cetylpyridinium and pyrocatechol violet complex
 7440-67-7D, cetylpyridinium and pyrocatechol violet complex
 7440-69-9D, cetylpyridinium and pyrocatechol violet complex
 (spectrum of)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L49 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1977:25562 HCAPLUS Full-text
 DOCUMENT NUMBER: 86:25562
 ORIGINAL REFERENCE NO.: 86:4013a,4016a
 TITLE: A highly sensitive spectrophotometric determination of palladium with Chromal Blue G and cetyltrimethylammonium chloride
 AUTHOR(S): Uesugi, K.; Shigematsu, T.
 CORPORATE SOURCE: Lab. Chem., Himeji Inst. Technol., Himeji, Japan
 SOURCE: Analytica Chimica Acta (1976), 84(2), 377-82
 CODEN: ACACAM; ISSN: 0003-2670
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB A new spectrophotometric method for the determination of palladium with Chromal Blue G (Color Index 43835) and cetyltrimethylammonium chloride is described. The sensitivity of the color reaction between Pd and Chromal Blue G is greatly increased in the presence of cetyltrimethylammonium chloride. The Pd complex has maximal absorbance at pH 3.2-3.8 and at 670 nm. Beer's law is obeyed at 0.08-1.4 ppm Pd; the molar absorptivity is 1.01 + 105 mole⁻¹ cm⁻¹ at 670 nm and the sensitivity is 1 + 10⁻³ µg Pd cm⁻². The mole ratio of Pd and Chromal Blue G in the complex in the presence of cetyltrimethylammonium chloride is 1:3. Only Sc interferes when NaF is used as masking agent.
 IT 7440-05-3, analysis
 (determination of, Chromal Blue G and cetyltrimethylammonium chloride in spectrophotometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 10143-02-9
 (in determination of palladium by spectrophotometry, increase sensitivity in solns. containing cetyltrimethylammonium chloride)
 RN 10143-02-9 HCAPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2-chloro-4-nitrophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)

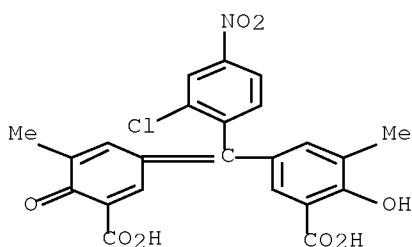


●2 Na

IT 7440-05-3D, Chromal Blue G complex 30635-96-2D,
 palladium complex
 (spectrum of, in solns. containing cetyltrimethylammonium chloride)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

RN 30635-96-2 HCAPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-
 ylidene)(2-chloro-4-nitrophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX
 NAME)



CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, analysis
 (determination of, Chromal Blue G and cetyltrimethylammonium chloride in
 spectrophotometric)
 IT 10143-02-9
 (in determination of palladium by spectrophotometry, increase sensitivity
 in solns. containing cetyltrimethylammonium chloride)
 IT 7440-05-3D, Chromal Blue G complex 30635-96-2D,
 palladium complex
 (spectrum of, in solns. containing cetyltrimethylammonium chloride)

L49 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1973:413183 HCAPLUS Full-text
 DOCUMENT NUMBER: 79:13183

ORIGINAL REFERENCE NO.: 79:2085a,2088a
 TITLE: Spectrophotometric determination of palladium with eriochrome cyanine R
 AUTHOR(S): Shigematsu, Tsunenobu; Matsui, Masakazu; Uesugi, Katsuya
 CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, Japan
 SOURCE: Bulletin of the Institute for Chemical Research, Kyoto University (1972), 50(6), 634-44
 CODEN: BICRAS; ISSN: 0023-6071
 DOCUMENT TYPE: Journal
 LANGUAGE: English

ED Entered STN: 12 May 1984

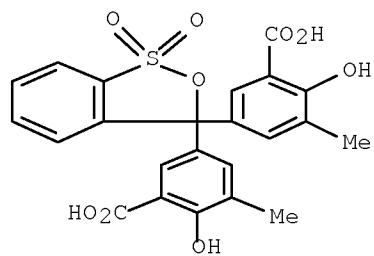
AB Pd was determined spectrophotometrically at 620 nm (molar absorptivity was 9.9 + 104) after complexation with Erichrome Cyanine R in the presence of tetradecyldimethylbenzylammonium chloride at pH 4.0-5.6. Beer's law was followed for 0.1-1.2 ppm Pd, and the sensitivity was 0.0011 µg Pd/cm². Interference by Cu(II) and Fe(III) in amts. >150 µg cannot be eliminated with F⁻ masking agent. In the presence and absence of I, the complex had a 1:3 and 1:2 metal-ligand ratio, resp. In the absence of I, absorbance was measured at 605 nm (molar absorptivity was 6.8 + 104), and the sensitivity was 1.6 + 10-3 µg Pd/cm². Erichrome Cyanine R gave a more sensitive method for Pd determination than other triphenylmethane dyes.

IT 7440-05-3, analysis
 (determination of, eriochrome cyanine R in spectrophotometric)

RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 3564-18-9
 (in determination of palladium, spectrophotometric)
 RN 3564-18-9 HCPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



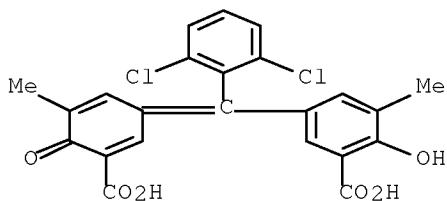
●3 Na

IT 1796-92-50, Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) (2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, disodium salt, palladium complex 3267-40-1D, Benzoic acid,

5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,3,6-trichlorophenyl)methyl]-2-hydroxy-3-methyl-, disodium salt, palladium complex 3564-17-8D, Benzoic acid,
 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, palladium complex 7452-52-0D, Benzoic acid,
 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)[2-chloro-4-(diethylamino)phenyl]methyl]-2-hydroxy-3-methyl-, palladium complex 10143-02-9D, Benzoic acid,
 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2-chloro-4-nitrophenyl)methyl]-2-hydroxy-3-methyl-, disodium salt, palladium complex
 (spectrum of)

RN 1796-92-5 HCAPLUS

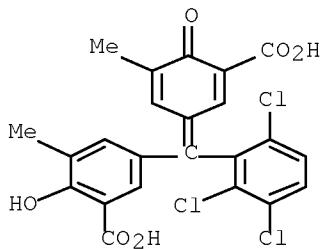
CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

RN 3267-40-1 HCAPLUS

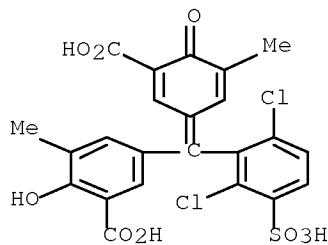
CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,3,6-trichlorophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

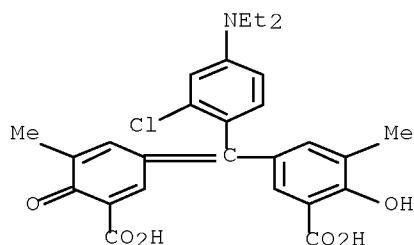
RN 3564-17-8 HCAPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



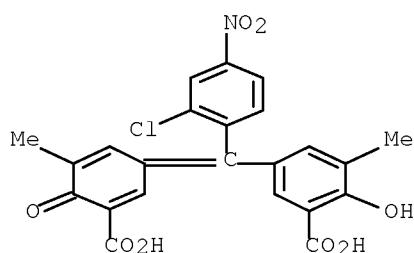
RN 7452-52-0 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) [2-chloro-4-(diethylamino)phenyl]methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



RN 10143-02-9 HCPLUS

CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) (2-chloro-4-nitrophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

CC 79-6 (Inorganic Analytical Chemistry)

IT 7440-05-3, analysis

(determination of, eriochrome cyanine R in spectrophotometric)

IT 139-08-2 3564-18-9

(in determination of palladium, spectrophotometric)

IT 1796-92-5D, Benzoic acid,

5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) (2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl-, disodium salt, palladium complex 3267-40-10, Benzoic acid,
 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) (2,3,6-trichlorophenyl)methyl]-2-hydroxy-3-methyl-, disodium salt, palladium complex 3564-17-80, Benzoic acid,
 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) (2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, palladium complex 7452-52-00, Benzoic acid,
 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) [2-chloro-4-(diethylamino)phenyl]methyl]-2-hydroxy-3-methyl-, palladium complex 10143-02-90, Benzoic acid,
 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) (2-chloro-4-nitrophenyl)methyl]-2-hydroxy-3-methyl-, disodium salt, palladium complex
 (spectrum of)

L49 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1972:456074 HCAPLUS Full-text
 DOCUMENT NUMBER: 77:56074
 ORIGINAL REFERENCE NO.: 77:9223a,9226a
 TITLE: Spectrophotometric determination of palladium with Pontachrome Azure Blue B
 AUTHOR(S): Uesugi, Katsuya; Shigematsu, Tsunenobu; Tabushi, Masayuki
 CORPORATE SOURCE: Lab. Chem., Himeji Inst. Technol., Himeji, Japan
 SOURCE: Analytica Chimica Acta (1972), 60(1), 79-86
 CODEN: ACACAM; ISSN: 0003-2670
 DOCUMENT TYPE: Journal
 LANGUAGE: English

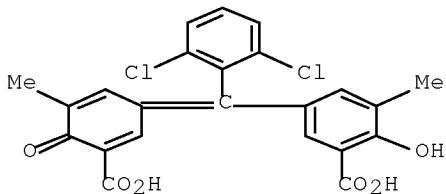
ED Entered STN: 12 May 1984
 AB A new spectrophotometric method for the determination of palladium with Pontachrome Azure Blue B (Color Index 43830) as reagent is described. The Pd complex has maximum absorbance at pH 5.2-5.7 and at 605 nm. Beer's law is obeyed up to at least 2.5 ppm Pd; the molar absorptivity is 4.79 + 104 l. mole⁻¹ cm⁻¹ and the sensitivity is 2.2 + 10⁻³ µg Pd cm⁻². The mole ratio of Pd and reagent in the complex is 1:2. The formation constant of the complex is 5.0 + 10¹⁰ under these conditions. Only Cu(II) and Fe(III) interfere with the determination of Pd when NaF is used as a masking agent.

IT 7440-05-3, analysis
 (determination of, Pontachrome Azure Blue B in)

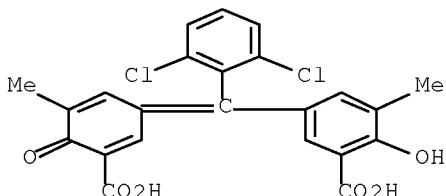
RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 15012-28-9
 (in determination of palladium)
 RN 15012-28-9 HCAPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene) (2,6-dichlorophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



IT 1796-92-5D, Benzoic acid,
5-[{(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl}-2-hydroxy-3-methyl-, disodium salt, palladium complexes
(spectra of)
RN 1796-92-5 HCPLUS
CN Benzoic acid, 5-[{(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl}-2-hydroxy-3-methyl-, sodium salt (1:2) (CA INDEX NAME)



●2 Na

CC 79-6 (Inorganic Analytical Chemistry)
IT 7440-05-3, analysis
(determination of, Pontachrome Azure B in)
IT 15012-28-9
(in determination of palladium)
IT 1796-92-5D, Benzoic acid,
5-[{(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichlorophenyl)methyl}-2-hydroxy-3-methyl-, disodium salt, palladium complexes
(spectra of)

L49 ANSWER 31 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1964:451207 HCPLUS Full-text
DOCUMENT NUMBER: 61:51207
ORIGINAL REFERENCE NO.: 61:8890g-h
TITLE: Absorptiometric study of ammonium aurintricarboxylate as a reagent for palladium(II)
AUTHOR(S): Munshi, Kailash N.; Dey, Arun K.
CORPORATE SOURCE: Univ. Allahabad, India
SOURCE: Talanta (1964), 11(8), 1265-8
CODEN: TLNTA2; ISSN: 0039-9140
DOCUMENT TYPE: Journal
LANGUAGE: English

ED Entered STN: 22 Apr 2001

AB A colorimetric method for the determination of Pd(II) with NH₄ aurintricarboxylate (aluminon) is described. The method involves the formation of a violet chelate of Pd-aluminon at pH 4.0. The color reaction has a sensitivity of 0.026 γ/cm.² for log I₀/I = 0.001, and obeys Beer's law over the range of 0.14-7.7 p.p.m. of Pd. The effects of pH, time, order of addition of the reagents, temperature, and diverse ions were investigated, and a procedure for the microdetn. of Pd was described. The composition of the complex was confirmed by 3 different methods as 1:2 (metal:reagent), and the equilibrium of 109.8 was found by the method of D., et al. (Mukherji and D., Ca 52, 18066c; 53, 21378e), at pH 4.0, 25°, and ionic strength 0.1M.

IT 7440-05-3, Palladium

(analysis, determination, NH₄ aurintricarboxylate in)

RN 7440-05-3 HCAPLUS

CN Palladium (CA INDEX NAME)

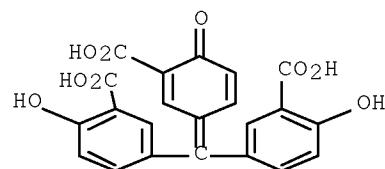
Pd

IT 569-58-4, 1,4-Cyclohexadiene-1-carboxylic acid,

3-[bis(3-carboxy-4-hydroxyphenyl)methylene]-6-oxo-, triammonium salt
(in Pd determination)

RN 569-58-4 HCAPLUS

CN Benzoic acid, 3,3'-(3-carboxy-4-oxo-2,5-cyclohexadien-1-ylidene)methylene]bis[6-hydroxy-, ammonium salt (1:3) (CA INDEX NAME)



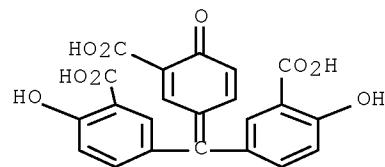
●3 NH₃

IT 4431-00-9, 1,4-Cyclohexadiene-1-carboxylic acid,

3-[bis(3-carboxy-4-hydroxyphenyl)methylene]-6-oxo-, palladium complex
(ionization and spectrum of)

RN 4431-00-9 HCAPLUS

CN Benzoic acid, 3,3'-(3-carboxy-4-oxo-2,5-cyclohexadien-1-ylidene)methylene]bis[6-hydroxy- (CA INDEX NAME)



CC 2 (Analytical Chemistry)
IT 7440-05-3, Palladium
(analysis, determination, NH₄ aurintricarboxylate in)
IT 569-58-4, 1,4-Cyclohexadiene-1-carboxylic acid,
3-[bis(3-carboxy-4-hydroxyphenyl)methylene]-6-oxo-, triammonium salt
(in Pd determination)
IT 4431-00-9, 1,4-Cyclohexadiene-1-carboxylic acid,
3-[bis(3-carboxy-4-hydroxyphenyl)methylene]-6-oxo-, palladium complex
(ionization and spectrum of)

L49 ANSWER 32 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1964:86382 HCPLUS Full-text

DOCUMENT NUMBER: 60:86382

ORIGINAL REFERENCE NO.: 60:15119f-h

TITLE: Photometric investigation of precipitation titrations

AUTHOR(S): St. Blakeley, J. H.; Ryan, D. E.

CORPORATE SOURCE: Dalhousie Univ., Halifax, Can.

SOURCE: Analytica Chimica Acta (1964), 30(4),
346-52

CODEN: ACACAM; ISSN: 0003-2670

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 22 Apr 2001

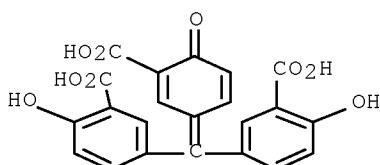
AB Precipitation titrations were studied photometrically with >50 precipitants (SO₄--, Cl-, Br-, I-, CO₃--, C₂O₄--, PO₄3-, 8-quinolinol, NH₄ aurintricarboxylate, phytic acid, BzN(Ph)OH, o-phenanthroline (I)) in a concentration range of 10-2-10-4M, by means of a turbidimeter (horizontal light absorbance) or a heterometer (vertical absorbance) (Bobtelsky and Bar-Gadda, CA 47, 6300b). The automatically-recorded steady-state absorbance values of a stirred precipitate or suspension were plotted vs. volume of the titrant added; the end point is the intersection of the absorbance-volume curve with the maximum absorbance line. The shapes of titration curves obtained by the turbidimetric and heterometric methods were approx. the same. A smooth curve was obtained for the titration of Pd⁺⁺ with I, with the end point at a Pd⁺⁺/I mole ratio of 1:1. I- + Cl- are titrated quant. with Hg²⁺, but an intermediate break equivalent to I- was not obtained. Ba⁺⁺ + Sr⁺⁺ are titrated quant. by SO₄-- without an intermediate break for Ba⁺⁺. F- + C₂O₄-- are titrated quant. by Ca⁺⁺, but a break occurs before the F- end point. The titration of 8-quinolinol with Al³⁺ was not stoichiometric owing to complex formation. No intermediate breaks in the titration curves were found where stepwise formation was possible. The error by either method is ≤1%. Changes in the phys. form of the precipitate can increase the error to 5%.

IT 4431-00-9

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 4431-00-9 HCPLUS

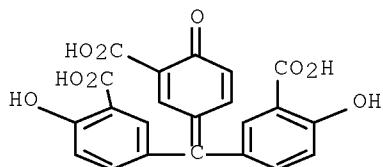
CN Benzoic acid, 3,3'-(3-carboxy-4-oxo-2,5-cyclohexadien-1-ylidene)methylene]bis[6-hydroxy- (CA INDEX NAME)



IT 7440-05-3, Palladium
 (analysis, determination, precipitation titrimetric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 569-58-4, 1,4-Cyclohexadiene-1-carboxylic acid,
 3-[bis(3-carboxy-4-hydroxyphenyl)methylene]-6-oxo-, triammonium salt
 (in precipitation titrations)
 RN 569-58-4 HCAPLUS
 CN Benzoic acid, 3,3'-(3-carboxy-4-oxo-2,5-cyclohexadien-1-
 ylidene)methylene]bis[6-hydroxy-, ammonium salt (1:3) (CA INDEX NAME)

●3 NH₃

IT 7440-05-3, Palladium
 (titration of, by 1,10-phenanthroline)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 2 (Analytical Chemistry)
 IT 4431-00-9
 (Derived from data in the 7th Collective Formula Index (1962-1966))
 IT 7440-05-3, Palladium
 (analysis, determination, precipitation titrimetric)
 IT 569-58-4, 1,4-Cyclohexadiene-1-carboxylic acid,
 3-[bis(3-carboxy-4-hydroxyphenyl)methylene]-6-oxo-, triammonium salt
 (in precipitation titrations)
 IT 7440-05-3, Palladium
 (titration of, by 1,10-phenanthroline)

DOCUMENT NUMBER: 60:27073
 ORIGINAL REFERENCE NO.: 60:4789c-e
 TITLE: Spectrophotometric determination of palladium with 2-mercaptopbenzoxazole
 AUTHOR(S): Arita, Takaichi; Yoe, John H.
 CORPORATE SOURCE: Univ. of Virginia, Charlottesville
 SOURCE: Analytica Chimica Acta (1963), 29(6), 500-4
 CODEN: ACACAM; ISSN: 0003-2670
 DOCUMENT TYPE: Journal
 LANGUAGE: English

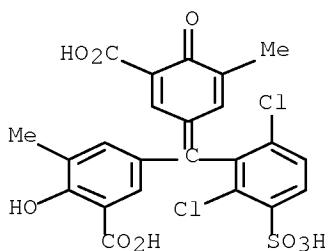
ED Entered STN: 22 Apr 2001

AB One ml. of a solution containing 100-300 p.p.m. Pd is transferred into a 10-ml. volumetric flask and diluted with 3 ml. each of dioxane and cyclohexanone. After mixing, 2 ml. of a freshly prepared solution (0.15%) of 2-mercaptopbenzoxazole (I) in 1:1 dioxane-water is added. The solution is made up to volume with dioxane and the mixture allowed to stand for about 20 min. The absorbance at 375 μ m of the yellow Pd complex with I is measured against the reagent solution as a blank. The amount of Pd is obtained from a reference curve. The color reaction has a sensitivity of 0.08 γ of Pd/cm.2 for $\log_{10}O/I = 0.001$ and obeys Beer's law at 2-40 p.p.m. Pd. The Pd complex with I is formed instantaneously and over a wide pH range. The tolerances of interfering ions such as Fe, Cu, Au, Os in the presence of 20 p.p.m. Pd are listed. Results of the spectroscopic method for the determination of 21.3 p.p.m. Pd in the presence of other elements are shown. The standard deviation was $\pm 0.88\%$.

IT 7440-05-3, Palladium
 (analysis, determination, 2-benzoxazolethiol in)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 1667-99-8, C.I. Mordant Blue 29
 (in palladium determination)
 RN 1667-99-8 HCPLUS
 CN Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

CC 2 (Analytical Chemistry)
IT 7440-05-3, Palladium
(analysis, determination, 2-benzoxazolethiol in)
IT 1667-99-8, C.I. Mordant Blue 29 2382-96-9,
2-Benzoxazolethiol
(in palladium determination)

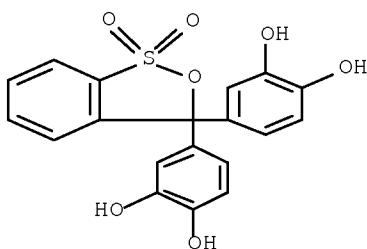
L49 ANSWER 34 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1963:69761 HCPLUS Full-text
DOCUMENT NUMBER: 58:69761
ORIGINAL REFERENCE NO.: 58:11939f-h,11940a
TITLE: Systematic analysis of zirconium after neutron
irradiation
AUTHOR(S): Fournet, Louis
CORPORATE SOURCE: Centre Etudes Chim., Metallurgique,
Vitry-sur-Seine, Fr.
SOURCE: Ann. Chim. (Paris) (1962), 7, 763-84
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
ED Entered STN: 22 Apr 2001
AB Hf-free Zr purified by the Kroll process plus arc-melting and by the Van Arkel
process was analyzed for 48 impurities, including 13 lanthanides, by neutron
activation. A thin-end-window GeigerMueller tube (β -rays) and γ -ray
scintillation spectrometer with a magnetic memory unit were used. Most of the
elements are determined in a 1-g. Zr sample irradiated 1 week in a 1-1.4 +
1012 neutron/sq. cm./sec. flux. The irradiated Zr is treated with Cl gas,
dissolved in 4N HCl, then divided in 3 portions. In the first, after sepn.,
Se (Se75, γ -rays at 136 and 265 k.e.v.) and part of the Au (γ -rays at 411
k.e.v.), Hg, As, Sb, W, Te (I132), Pb, Au, Cu, Mo (Mo99 can be from U), and Bi
are determined. In the second portion, after sepn., Tl204 Fe59, Ga72, In
(In115m if no Cd), Th (Pa233), Sc, Cr, Ni, Co, Cd (Cd115 or In115m), Mn, Zn
(Zn69m or Zn65), Na, K (K42 at 1.52 m.e.v.), Rb (Rb86, γ -rays at 1.08 m.e.v.
after K decay), Cs (Cs134 at 605 and 796 k.e.v.), lanthanides (more Np239 than
lanthanides are found), Ca, Sr, and Ba (Ba140 can be from U) are determined. In
the third portion, Hf, Zr, Nb, and Ta are determined. On a sep. sample after a
 γ ,n reaction (30 min. at 6 + 1012 neutrons/sq. cm./sec.), Br, Cl, and I are
determined. On another sample after γ ,n reaction, F is determined as BaSiF6
and N as NH4OH. On another sample after precipitation of Zr mandelate, the
hydroxides of Al and V and the 8-quinolinolates of Mg and Ti are irradiated
for 10-20 sec. and 1-2 min., resp., at a flux of 6 + 1012 neutrons/sq.
cm./sec. and counted immediately. The results are corrected for the fission
products and efficiency of extns. and pptns. The limits of determination and
details of chemical separation are given.
IT 7440-05-3, Palladium
(analysis, determination in Zr)
RN 7440-05-3 HCPLUS
CN Palladium (CA INDEX NAME)

Pd

IT 115-41-3, o-Toluenesulfonic acid,
 α,α -bis(3,4-dihydroxyphenyl)- α -hydroxy-,
 γ -sultone
(in Y determination)

RN 115-41-3 HCPLUS

CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-(CA INDEX NAME)



CC 2 (Analytical Chemistry)

IT 7429-90-5, Aluminum 7439-89-6, Iron 7439-96-5, Manganese
 7439-97-6, Mercury 7439-98-7, Molybdenum 7440-02-0, Nickel
 7440-03-1, Niobium 7440-05-3, Palladium 7440-09-7,
 Potassium 7440-17-7, Rubidium 7440-20-2, Scandium 7440-22-4,
 Silver 7440-23-5, Sodium 7440-24-6, Strontium 7440-25-7,
 Tantalum 7440-28-0, Thallium 7440-29-1, Thorium 7440-32-6,
 Titanium 7440-33-7, Tungsten 7440-36-0, Antimony 7440-38-2,
 Arsenic 7440-43-9, Cadmium 7440-46-2, Cesium 7440-47-3, Chromium
 7440-48-4, Cobalt 7440-50-8, Copper 7440-55-3, Gallium
 7440-57-5, Gold 7440-58-6, Hafnium 7440-61-1, Uranium 7440-62-2,
 Vanadium 7440-65-5, Yttrium 7440-66-6, Zinc 7440-70-2, Calcium
 7440-74-6, Indium 7553-56-2, Iodine 7726-95-6, Bromine
 7727-37-9, Nitrogen 7782-41-4, Fluorine 7782-50-5, Chlorine
 (analysis, determination in Zr)

IT 115-41-3, o-Toluenesulfonic acid,
a,a-bis(3,4-dihydroxyphenyl)-*a*-hydroxy-,
γ-sultone
 (in Y determination)

L49 ANSWER 35 OF 36 HCPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1960:108832 HCPLUS Full-text

DOCUMENT NUMBER: 54:108832

ORIGINAL REFERENCE NO.: 54:20634h-i,20635a

TITLE: Spectrophotometric determination of palladium with
 nioxime and benzildioxime

AUTHOR(S): Pshenitsyn, N. K.; Ivonina, O. M.

SOURCE: Zavodskaya Laboratoriya (1958), 24,
 1185-9

CODEN: ZVDLAU; ISSN: 0321-4265

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

ED Entered STN: 22 Apr 2001

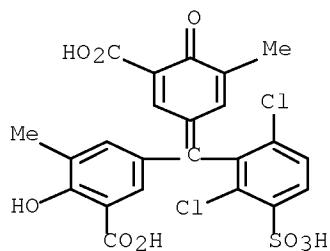
AB The ability of Pd oximes to dissolve in organic solvents was utilized by Peshkovoi and Shlenskaya (CA 49, 4448c) to develop a colorimetric method to determine small amts. of Pd. A table of dioximes and oximes suitable for spectrophotometric determination of Pd is given. To determine Pd in PdCl₂, the solution is adjusted to pH 1 when ni oxime (I) is used and pH 2 when *a*-benzil dioxime (II) is the reagent, with an acetate buffer. To form the oxime, 1 ml. 0.08% aqueous solution of I or 2.5 ml. of 0.02% alc. II is added, and the solution allowed to stand for 10-15 min. and 1 hr., resp. The complex

salt of Pd is extracted with CHCl₃, and the optical d. measured at 280 m μ for I and 323-5 m μ for II.

IT 7440-05-3, Palladium
 (analysis, determination, benzildioxime and nioxime in)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

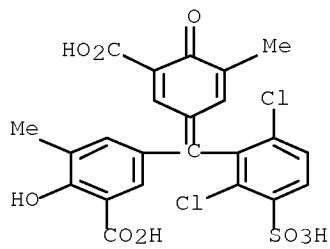
Pd

IT 1667-99-8, Alberon 3564-17-8, 2,3-Cresotic acid,
 5-[α -(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)-2,6-dichloro-3-sulfobenzyl]-
 (in aluminum determination, and spectrum of its Al complex)
 RN 1667-99-8 HCPLUS
 CN Benzoic acid, 5-[α -(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

RN 3564-17-8 HCPLUS
 CN Benzoic acid, 5-[α -(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2,6-dichloro-3-sulfophenyl)methyl]-2-hydroxy-3-methyl- (CA INDEX NAME)



IT 7647-10-1, Palladium chloride, PdCl₂
 (palladium determination in)

RN 7647-10-1 HCAPLUS
 CN Palladium chloride (PdCl₂) (CA INDEX NAME)

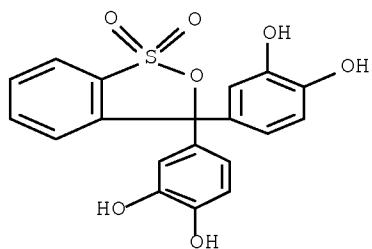
Cl—Pd—Cl

CC 7 (Analytical Chemistry)
 IT 7440-05-3, Palladium
 (analysis, determination, benzildioxime and nioxime in)
 IT 1667-99-8, Alberon 3564-17-8, 2,3-Cresotic acid,
 5-[α -(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)-2,6-dichloro-3-sulfobenzyl]-
 (in aluminum determination, and spectrum of its Al complex)
 IT 7647-10-1, Palladium chloride, PdCl₂
 (palladium determination in)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
 RECORD (1 CITINGS)

L49 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1956:56324 HCAPLUS Full-text
 DOCUMENT NUMBER: 50:56324
 ORIGINAL REFERENCE NO.: 50:10595d
 TITLE: Pyrocatechol Violet: indicator for chelatometric titrations
 AUTHOR(S): Suk, V.; Malat, M.
 CORPORATE SOURCE: Charles Univ., Prague
 SOURCE: Chemist-Analyst (1956), 45, 30-7
 CODEN: CHANAA; ISSN: 0095-8484
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 ED Entered STN: 22 Apr 2001
 AB Five possible formulas are discussed, and detailed directions are given for determining Bi, Th, In, Ga, Fe, Ir, Th, Cu, Al, Ti, Ni, Co, Pd, Mn, Zn, Mg, and Cd. A highly specific procedure for detecting Zr is pointed out. 37 references.
 IT 7440-05-3, Palladium
 (analysis, determination)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 115-41-3, Pyrocatechol Violet
 (as indicator in chelatometry)
 RN 115-41-3 HCAPLUS
 CN 1,2-Benzenediol, 4,4'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis-(CA INDEX NAME)



CC 7 (Analytical Chemistry)

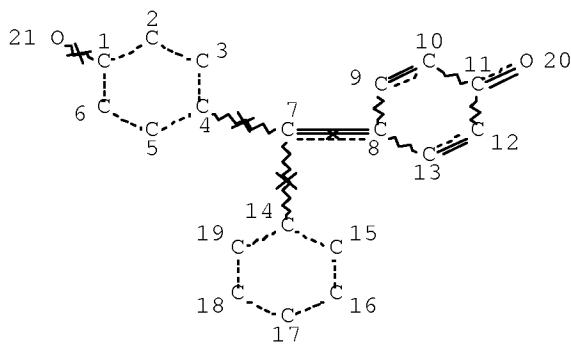
IT 7429-90-5, Aluminum 7439-89-6, Iron 7439-92-1, Lead 7439-95-4,
Magnesium 7439-96-5, Manganese 7440-05-3, Palladium
7440-29-1, Thorium 7440-32-6, Titanium 7440-43-9, Cadmium
7440-48-4, Cobalt 7440-50-8, Copper 7440-55-3, Gallium
7440-66-6, Zinc 7440-69-9, Bismuth 7440-74-6, Indium
(analysis, determination)

IT 115-41-3, Pyrocatechol Violet
(as indicator in chelatometry)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
RECORD (1 CITINGS)

=> d que 147

```
L2      8 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON (115-41-3/B1 OR
       1667-99-8/B1 OR 1796-92-5/B1 OR 3564-18-9/B1 OR 7440-05-3/B
       I OR 7440-50-8/B1 OR 7647-10-1/B1 OR 7758-98-7/B1)
L3      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "CHROME AZUROL
       S"/CN
L4      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "CHROME AZUROL
       B"/CN
L6      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "ERIOCHROME
       CYANINE R"/CN
L7      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON "PYROCATECHOL
       VIOLET"/CN
L10     STR
```



NODE ATTRIBUTES:

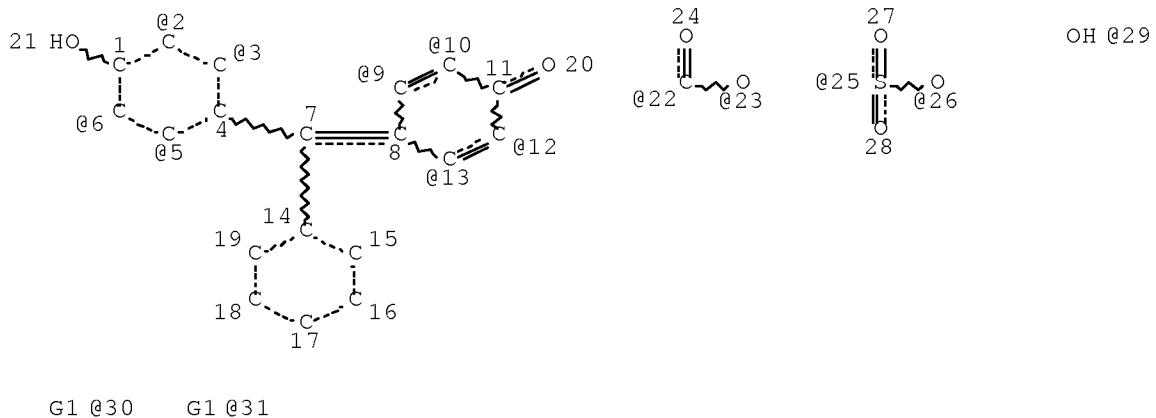
```
NSPEC   IS RC      AT    7
NSPEC   IS RC      AT   21
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
```

GRAPH ATTRIBUTES:

```
RSPEC I
NUMBER OF NODES IS  21
```

STEREO ATTRIBUTES: NONE

```
L14      SCR 1139
L16      931 SEA FILE=REGISTRY SSS FUL L10 AND L14
L17      2 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L16 AND L2
L19      2 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND PD/ELS
L22      124082 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L19
L23      1090 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L17
L24      19 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L22 AND L23
L28      2280 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L3 OR L4 OR L6 OR
       L7
L29      39 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L28 AND L22
L30      32 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L29 AND ANST/RL
L31      31 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L30 AND (1840-2003
       )/PRY,AY,PY
L33     STR
```



VAR G1=29/25/22/23

VPA 30-2/3/5/6 U

VPA 31-9/10/12/13 U

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 31

STEREO ATTRIBUTES: NONE

| | |
|-----|--|
| L35 | 167 SEA FILE=REGISTRY SUB=L16 SSS FUL L33 |
| L36 | 3081 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L35 |
| L37 | 37 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L36 AND L22 |
| L38 | 36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L37 AND (1840-2003)/PRY,AY,PY |
| L40 | 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 7440-05-3/RN |
| L41 | 116334 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L40 |
| L42 | 36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L38 AND L41 |
| L43 | 18 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND (1840-2003)/PRY,AY,PY |
| L44 | 36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L42 OR L43 |
| L45 | 22 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L31 AND L44 |
| L46 | 36 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L44 OR L45 |
| L47 | 9 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L31 NOT L46 |

=> d 147 1-9 ibib ed abs hitstr hitind

L47 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:335472 HCAPLUS Full-text

DOCUMENT NUMBER: 125:25154

ORIGINAL REFERENCE NO.: 125:4735a,4738a

TITLE: Study on the color reaction of palladium with ECR
in the presence of CTMAB

AUTHOR(S): Hu, Jiayuan; Xu, Lifang; Qian, Yiyin; Cai, Weidong

CORPORATE SOURCE: Shanghai Higher Academy Chemical Technol.,

Shanghai, 200233, Peop. Rep. China

SOURCE: Lihua Jianyan, Huaxue Fence (1996),
32(1), 41,58

CODEN: LJHFE2; ISSN: 1001-4020

PUBLISHER: Jixie Gongyebu Shanghai Cailiao Yanjiuso
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

ED Entered STN: 08 Jun 1996

AB The blue violet complex of palladium with eriochrome cyanine R formed at pH 5 in the presence of CTMAB and was used for spectrophotometric determination of Pd. The absorption maximum of the complex was at 625 nm; the molar absorptivity was $6.8 + 104 \text{ L mol}^{-1} \text{ cm}^{-1}$. Beer's law was obeyed at 0.1-2.8 $\mu\text{g/mL}$. The method was applied to the determination of Pd in catalysts with satisfactory results.

IT 7440-05-3, Palladium, analysis

(determination of palladium by spectrophotometry using eriochrome cyanine R and CTMAB)

RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

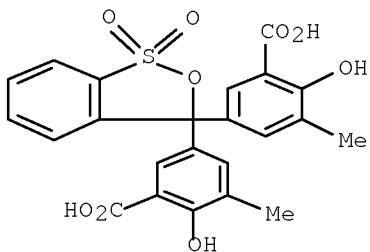
Pd

IT 3564-18-9, Eriochrome cyanine R

(determination of palladium by spectrophotometry using eriochrome cyanine R and CTMAB)

RN 3564-18-9 HCPLUS

CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)]



●3 Na

CC 79-6 (Inorganic Analytical Chemistry)

IT 7440-05-3, Palladium, analysis

(determination of palladium by spectrophotometry using eriochrome cyanine R and CTMAB)

IT 57-09-0, CTMAB 3564-18-9, Eriochrome cyanine R

(determination of palladium by spectrophotometry using eriochrome cyanine R and CTMAB)

L47 ANSWER 2 OF 9 HCPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1989:165170 HCPLUS Full-text

DOCUMENT NUMBER: 110:165170

ORIGINAL REFERENCE NO.: 110:27165a, 27168a

TITLE: Different-ligand complexes of some metal ions with

AUTHOR(S): Eriochrome Cyanine R and diphenylguanidine
 Chermakova, L. I.; Baltgalve, I.; Rudzitis, G.
 CORPORATE SOURCE: Univ. Charles, Prague, Czech.
 SOURCE: Latvijas PSR Zinatnu Akademijas Vestis, Kimijas
 Serija (1988), (5), 578-81
 CODEN: LZAKAM; ISSN: 0002-3248

DOCUMENT TYPE: Journal
 LANGUAGE: Russian

ED Entered STN: 30 Apr 1989

AB Eriochrome Cyanine R and diphenylguanidine form with Cu(II), Pd, and Be mixed-ligand complexes. Complexes of Be are practically completely extracted by mixts. of CHCl₃ with BuOH (7:3). The spectral contrast of the color reactions is 55-160 nm. The absorption maximum are at 560-590 nm. The molar absorptivities are 35,000-80,000. Maximum complex formation takes place at pH 6.0-7.5. The mixed-ligand complexes of Cu(II) and Be are more deeply and intensely colored than the homoligand complexes. This color reaction can be used for determining Be by extraction and spectrophotometry.

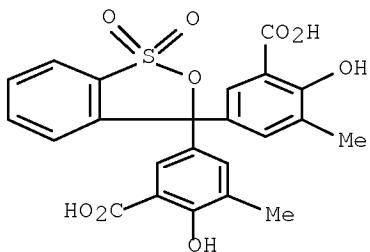
IT 7440-05-3, Palladium, reactions
 (complexation of, with diphenylguanidine and Eriochrome Cyanine R)

RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

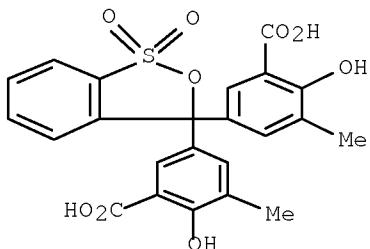
Pd

IT 3564-18-9
 (for determination of beryllium by extraction and spectrophotometry)
 RN 3564-18-9 HCPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 3564-18-9D, Eriochrome cyanin R, transition metal complexes
 with diphenylguanidine and
 (spectra of)
 RN 3564-18-9 HCPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 7440-05-3D, Palladium, diphenylguanidine Eriochrome Cyanine R complex
 (spectrum of)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)
 Section cross-reference(s): 78
 IT 7440-05-3, Palladium, reactions 7440-50-8, Copper, reactions
 (complexation of, with diphenylguanidine and Eriochrome Cyanine R)
 IT 102-06-7 3564-18-9
 (for determination of beryllium by extraction and spectrophotometry)
 IT 102-06-7D, Diphenylguanidine, transition metal complexes with Eriochrome Cyanine R and 3564-18-9D, Eriochrome cyanin R, transition metal complexes with diphenylguanidine and (spectra of)
 IT 744-05-8D, diphenylguanidine Eriochrome Cyanine R complex
 7440-05-3D, Palladium, diphenylguanidine Eriochrome Cyanine R complex 7440-41-7D, Beryllium, diphenylguanidine Eriochrome Cyanine R complex
 (spectrum of)

L47 ANSWER 3 OF 9 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1986:526174 HCPLUS Full-text
 DOCUMENT NUMBER: 105:126174
 ORIGINAL REFERENCE NO.: 105:20207a,20210a
 TITLE: Spectrophotometric determination of palladium (II) using thiolactams and Eriochrome Cyanine R
 AUTHOR(S): Sikorska-Tomicka, Halina
 CORPORATE SOURCE: Pol.
 SOURCE: Zeszyty Naukowe Politechniki Białostockiej:
 Matematyka Fizyka, Chemia (1985), 9,
 77-84
 CODEN: ZNPCDA; ISSN: 0324-8410
 DOCUMENT TYPE: Journal
 LANGUAGE: Polish
 ED Entered STN: 03 Oct 1986

AB The method is based on the formation of a 1:2:4 ternary complex of Pd, Eriochrome Cyanine R and a thiolactam at pH 3.5-5.5, followed by extraction with CHCl₃ and spectrophotometric measurement at 500 nm for thiocapro lactam, 495 nm for thiopiperidone, and 480 nm for thiopyrrolidone in the concentration range of Pd 0.1-4.0 µg/cm³. The effect of other ions was investigated.

IT 7440-05-3, analysis
 (determination of, Eriochrome Cyanine R and thiolactams in extraction-spectrophotometric)

RN 7440-05-3 HCPLUS

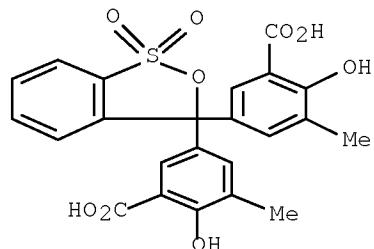
CN Palladium (CA INDEX NAME)

Pd

IT 3564-18-9
 (for determination of palladium by extraction and spectrophotometry)

RN 3564-18-9 HCPLUS

CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)

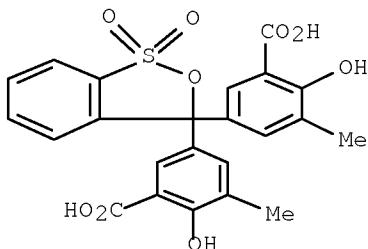


●3 Na

IT 3564-18-9D, palladium complexes 7440-05-3D,
 complexes with Eriochrome Cyanine R and thiolactams
 (spectra of)

RN 3564-18-9 HCPLUS

CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

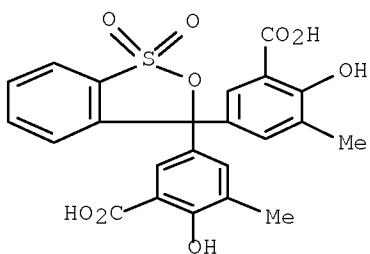
Pd

CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, analysis
 (determination of, Eriochrome Cyanine R and thiolactams in extraction-spectrophotometric)
 IT 2295-35-4 3564-18-9 7203-96-5 13070-01-4
 (for determination of palladium by extraction and spectrophotometry)
 IT 2295-35-4D, palladium complexes 3564-18-9D, palladium complexes 7203-96-5D, palladium complexes 7440-05-3D, complexes with Eriochrome Cyanine R and thiolactams 13070-01-4D, palladium complexes
 (spectra of)

L47 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1986:417581 HCAPLUS Full-text
 DOCUMENT NUMBER: 105:17581
 ORIGINAL REFERENCE NO.: 105:2793a,2796a
 TITLE: Spectrophotometric determination of thiolactams with palladium(II) and Eriochrome Cyanine R
 AUTHOR(S): Sikorska-Tomicka, Halina
 CORPORATE SOURCE: Zakl. Chem., Politech. Bialostocka, Bialystok, 15-351, Pol.
 SOURCE: Chemia Analityczna (Warsaw, Poland) (1985), 30(4), 657-63
 CODEN: CANWAJ; ISSN: 0009-2223
 DOCUMENT TYPE: Journal
 LANGUAGE: Polish
 ED Entered STN: 13 Jul 1986
 AB Thiolactams (TLA) reacts with Pd(II) and Eriochrome Cyanine R (ERC) to form ternary complexes with the Pd:ERC:TLA molar ratio 1:2:4, the complex is extractable at pH 3-4 with CHCl₃; the λ_{max} of the extract is 480-510 nm. The method permits the determination of 20-160 µg thiolactam/mL (or thiopyrrolidone, thiopiperidinone, thiocaprolactam, thioenantholactam) in the presence of a 10-fold excess of lactams.
 IT 3564-18-9 7440-05-3, uses and miscellaneous
 (in determination of thiolactams by extraction and spectrophotometry)

RN 3564-18-9 HCAPLUS

CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

RN 7440-05-3 HCAPLUS
CN Palladium (CA INDEX NAME)

Pd

CC 80-6 (Organic Analytical Chemistry)
 IT 3564-18-9 7440-05-3, uses and miscellaneous
 (in determination of thiolactams by extraction and spectrophotometry)
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS
 RECORD (1 CITINGS)

L47 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1983:463340 HCAPLUS Full-text
 DOCUMENT NUMBER: 99:63340
 ORIGINAL REFERENCE NO.: 99:9689a,9692a
 TITLE: Complex formation of some elements with Eriochrome Cyanine R
 AUTHOR(S): Tikhonov, V. N.; Anisimova, T. M.
 CORPORATE SOURCE: Chuvash State Univ., Cheboksary, USSR
 SOURCE: Zhurnal Analiticheskoi Khimii (1983),
 38(5), 778-82
 CODEN: ZAKHA8; ISSN: 0044-4502
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 ED Entered STN: 12 May 1984
 AB The formation of complexes of Be, Cu(II), Fe(III), Pd(II), and V(IV) was studied by spectrophotometry to find the optimum conditions for determining these metals. The molar absorptivities of the Eriochrome Cyanine R complexes are (2.2-4.7) + 104 at 520-575 nm and pH 5.4-6.8. The effects of HOAc + NaOAc concentration, dilution, and acidity of the solution before adding the reagent were studied. The optimum initial pH is .apprx.2.
 IT 7440-05-3, analysis
 (determination of, Eriochrome Cyanine R in spectrophotometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

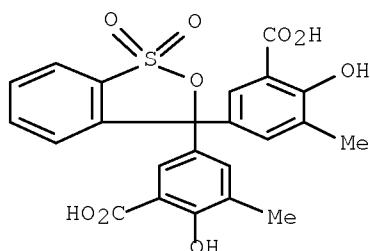
Pd

IT 3564-18-9

(in determination of metals by spectrophotometry)

RN 3564-18-9 HCPLUS

CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 7440-05-3D, Eriochrome Cyanine R complex
(spectrum of)

RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

Pd

CC 79-1 (Inorganic Analytical Chemistry)

Section cross-reference(s): 73, 78

IT 7439-89-6, analysis 7440-05-3, analysis 7440-41-7,
analysis 7440-50-8, analysis 7440-62-2, analysis
(determination of, Eriochrome Cyanine R in spectrophotometric)

IT 3564-18-9

(in determination of metals by spectrophotometry)

IT 7439-89-6D, Eriochrome Cyanine R complex 7440-05-3D,
Eriochrome Cyanine R complex 7440-41-7D, Eriochrome Cyanine R
complex 7440-50-8D, Eriochrome Cyanine R complex 7440-62-2D,
Eriochrome Cyanine R complex
(spectrum of)

L47 ANSWER 6 OF 9 HCPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1979:621888 HCPLUS Full-text

DOCUMENT NUMBER: 91:221888

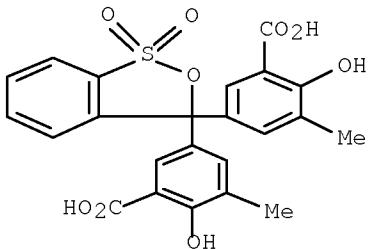
ORIGINAL REFERENCE NO.: 91:35603a,35606a

TITLE: Eriochrome Cyanine R in the presence of
cetyltrimethylammonium as a metallochrome

AUTHOR(S): Tikhonov, V. N.; Stepanova, T. Ya.
 CORPORATE SOURCE: Chuvash State Univ., Cheboksary, USSR
 SOURCE: Zhurnal Analiticheskoi Khimii (1979),
 34(8), 1479-84
 CODEN: ZAKHA8; ISSN: 0044-4502

DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 ED Entered STN: 12 May 1984
 AB A mixture of Eriochrome Cyanine R (I) and cetyltrimethylammonium bromide is a more selective complexometric indicator than I alone. complexometric titration with this indicator mixture gives a high contrast in the color change at the end point. Cu(II), Ga, Sc, Th, Fe(III), and In can be titrated directly with 0.005M EDTA. Al, Ti(IV), Zr, and V(IV) are determined by back titration with 0.005M FeCl₂. A complexometric method was developed for Al determination in ferrosilicon.

IT 3564-18-9 (cetyltrimethylammonium bromide-containing, as mixed complexometric indicator)
 RN 3564-18-9 HCPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 7440-05-3, analysis (determination of, cetyltrimethylammonium bromide-Eriochrome Cyanine R mixed indicator in complexometric)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

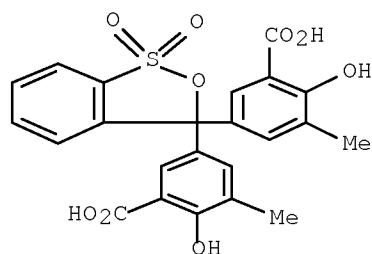
Pd

CC 79-6 (Inorganic Analytical Chemistry)
 IT 3564-18-9 (cetyltrimethylammonium bromide-containing, as mixed complexometric indicator)
 IT 7439-89-6, analysis 7440-05-3, analysis 7440-20-2, analysis 7440-50-8, analysis 7440-55-3, analysis (determination of, cetyltrimethylammonium bromide-Eriochrome Cyanine R mixed indicator in complexometric)

L47 ANSWER 7 OF 9 HCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1978:145626 HCPLUS Full-text
 DOCUMENT NUMBER: 88:145626
 ORIGINAL REFERENCE NO.: 88:22827a,22830a
 TITLE: Complexing of palladium (II) with Eriochrome Cyanine R and cetyltrimethylammonium
 AUTHOR(S): Tikhonov, V. N.; Petukhova, E. A.; Vashurkina, E. A.
 CORPORATE SOURCE: Chuv. Gos. Univ., Cheboksary, USSR
 SOURCE: Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (1978), 21(1), 43-5
 CODEN: IVUKAR; ISSN: 0579-2991
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 ED Entered STN: 12 May 1984
 AB Pd²⁺ was determined spectrophotometrically by measuring the absorbance of the 1:2:3 Pd-Eriochrome Cyanine R-cetyltrimethylammonium complex at 600-20 nm (molar absorptivity 9.6 + 104) in a pH 5.5-6.0 NaOAc buffer. Cu²⁺, Be, Al, Ga, In, Sc, Fe³⁺, EDTA, tartrate, and citrate interfere strongly.
 IT 7440-05-3, analysis
 (determination of, cetyltrimethylammonium and Eriochrome Cyanine R in spectrophotometric)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 3564-18-9
 (in determination of palladium by spectrophotometry)
 RN 3564-18-9 HCPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 7440-05-3D, cetyltrimethylammonium and Eriochrome Cyanine R complex
 (spectrum of)
 RN 7440-05-3 HCPLUS

CN Palladium (CA INDEX NAME)

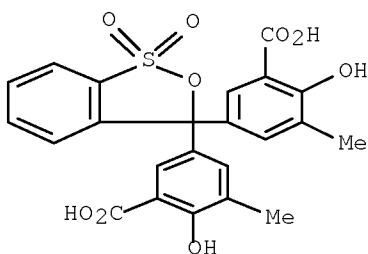
Pd

CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, analysis
 (determination of, cetyltrimethylammonium and Eriochrome Cyanine R in spectrophotometric)
 IT 57-09-0 3564-18-9
 (in determination of palladium by spectrophotometry)
 IT 2588-24-1D, titanium complex 6899-10-1D, titanium complex
 7440-05-3D, cetyltrimethylammonium and Eriochrome Cyanine R complex
 (spectrum of)

L47 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1976:503400 HCAPLUS Full-text
 DOCUMENT NUMBER: 85:103400
 ORIGINAL REFERENCE NO.: 85:16497a,16500a
 TITLE: Spectrophotometric determination of the platinum metals. Determination of palladium with Eriochrome Cyanine R in the presence of cetylpyridinium bromide
 AUTHOR(S): Duchkova, H.; Malat, M.; Cermakova, L.
 CORPORATE SOURCE: Dep. Anal. Chem., Charles Univ., Prague, Czech.
 SOURCE: Analytical Letters (1976), 9(5), 487-95
 CODEN: ANALBP; ISSN: 0003-2719
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB A new photometric method was developed for the determination of μg amts. of Pd(II) on the basis of a ternary complex of the metal, Eriochrome Cyanine R, and cetylpyridinium bromide, which is formed in an acetate buffer medium (pH 3.5-5.5) and exhibits an absorption maximum at 630 nm. The system obeys Beer's law for 0.2-2.7 ppm Pd(II). The mean relative standard deviation is 0.14%, the molar absorptivity is 6.5 + 104 at the wavelength of the maximum difference between the absorbances of the sample and the blank (630 nm), and the detection limit is $1.2 + 10^{-3} \mu\text{g cm}^{-2}$ for $A = 0.001$.
 IT 7440-05-3, analysis
 (determination of, Eriochrome Cyanine R and cetylpyridinium bromide in spectrophotometric)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

IT 3564-18-9
 (in determination of palladium, spectrophotometric)
 RN 3564-18-9 HCAPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 7440-05-3D, Palladium, cetylpyridinium and Eriochrome Cyanine R complex
 (spectrum of)
 RN 7440-05-3 HCAPLUS
 CN Palladium (CA INDEX NAME)

Pd

CC 79-6 (Inorganic Analytical Chemistry)
 IT 7440-05-3, analysis
 (determination of, Eriochrome Cyanine R and cetylpyridinium bromide in spectrophotometric)
 IT 140-72-7 3564-18-9
 (in determination of palladium, spectrophotometric)
 IT 2588-24-1D, Benzoic acid, 5-[(3-carboxy-5-methyl-4-oxo-2,5-cyclohexadien-1-ylidene)(2-sulfophenyl)methyl]-2-hydroxy-3-methyl-, palladium complex 7440-05-3D, Palladium, cetylpyridinium and Eriochrome Cyanine R complex 7773-52-6D, Pyridinium, 1-hexadecyl-, palladium complex
 (spectrum of)

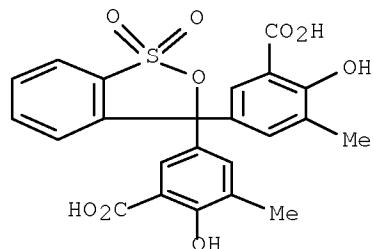
L47 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1971:119771 HCAPLUS Full-text
 DOCUMENT NUMBER: 74:119771
 ORIGINAL REFERENCE NO.: 74:19333a,19336a
 TITLE: Colored chelate of palladium(II) with Eriochrome Cyanine RC
 AUTHOR(S): Shrivastava, Suresh C.; Munshi, Kailash N.; Dey, Arun K.
 CORPORATE SOURCE: Chem. Lab., Univ. Allahabad, Allahabad, India
 SOURCE: Journal of the Indian Chemical Society (1970), 47(10), 1013-14
 CODEN: JICSAH; ISSN: 0019-4522
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 12 May 1984
 AB Pd(II) formed a 1:1 anionic complex with Eriochrome Cyanine RC with the conditional stability constant $\log K = 5.0$ at 25° and at pH 4.5, which

followed Beer's law at 550 nm (molar absorptivity was 1.35 + 104) at pH 4.5 for 0.21-5.12 ppm Pd. The proposed structure for the complex involved a chelate ring formed by Pd coordination with the phenolic O and adjacent carboxylic O atoms.

IT 7440-05-3, analysis
 (determination of, C.I. Mordant Blue 3 in)
 RN 7440-05-3 HCPLUS
 CN Palladium (CA INDEX NAME)

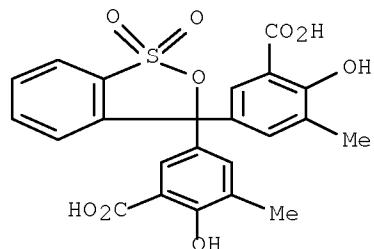
Pd

IT 3564-18-9
 (in determination of palladium)
 RN 3564-18-9 HCPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

IT 3564-18-9DB, C.I. Mordant Blue 3, palladium complexes
 (preparation of)
 RN 3564-18-9 HCPLUS
 CN Benzoic acid, 3,3'-(1,1-dioxido-3H-2,1-benzoxathiol-3-ylidene)bis[6-hydroxy-5-methyl-, sodium salt (1:3) (CA INDEX NAME)



●3 Na

CC 79 (Inorganic Analytical Chemistry)
IT 7440-05-3, analysis
 (determination of, C.I. Mordant Blue 3 in)
IT 3564-18-9
 (in determination of palladium)
IT 3564-18-9DP, C.I. Mordant Blue 3, palladium complexes
 (preparation of)

=> d his nofile

(FILE 'HOME' ENTERED AT 09:57:32 ON 03 JUN 2010)

FILE 'HCAPLUS' ENTERED AT 09:57:43 ON 03 JUN 2010

L1 1 SEA SPE=ON ABB=ON PLU=ON US20050266574/PN
SEL RN

FILE 'REGISTRY' ENTERED AT 09:57:55 ON 03 JUN 2010

L2 8 SEA SPE=ON ABB=ON PLU=ON (115-41-3/B1 OR 1667-99-8/B1
OR 1796-92-5/B1 OR 3564-18-9/B1 OR 7440-05-3/B1 OR
7440-50-8/B1 OR 7647-10-1/B1 OR 7758-98-7/B1)
E CHROME AZUROL S/CN

L3 1 SEA SPE=ON ABB=ON PLU=ON "CHROME AZUROL S"/CN
E CHROME AZUROL B/CN

L4 1 SEA SPE=ON ABB=ON PLU=ON "CHROME AZUROL B"/CN
E ERIOCHROME CYANINE/CN

L5 1 SEA SPE=ON ABB=ON PLU=ON "ERIOCHROME CYANINE"/CN

L6 1 SEA SPE=ON ABB=ON PLU=ON "ERIOCHROME CYANINE R"/CN
E PYROCATECHOL VIOLET/CN

L7 1 SEA SPE=ON ABB=ON PLU=ON "PYROCATECHOL VIOLET"/CN

L8 STR

L9 3 SEA SSS SAM L8

L10 STR L8

L11 0 SEA SSS SAM L10

L12 SCR 1029 OR 1035

L13 1 SEA SSS SAM L10 AND L12

L14 SCR 1139

L15 3 SEA SSS SAM L10 AND L14

L16 931 SEA SSS FUL L10 AND L14

L17 2 SEA SPE=ON ABB=ON PLU=ON L16 AND L2
SAV L16 WHI790/A

L18 0 SEA SPE=ON ABB=ON PLU=ON L16 AND PD/ELS

L19 2 SEA SPE=ON ABB=ON PLU=ON L2 AND PD/ELS

L20 148 SEA SPE=ON ABB=ON PLU=ON L16 AND M/ELS

L21 783 SEA SPE=ON ABB=ON PLU=ON L16 NOT L20

FILE 'HCAPLUS' ENTERED AT 10:25:01 ON 03 JUN 2010

L22 124082 SEA SPE=ON ABB=ON PLU=ON L19

L23 1090 SEA SPE=ON ABB=ON PLU=ON L17

L24 19 SEA SPE=ON ABB=ON PLU=ON L22 AND L23

L25 12051 SEA SPE=ON ABB=ON PLU=ON L16

L26 82 SEA SPE=ON ABB=ON PLU=ON L22 AND L25

L27 54 SEA SPE=ON ABB=ON PLU=ON L26 AND ANST/RL

L28 2280 SEA SPE=ON ABB=ON PLU=ON L3 OR L4 OR L6 OR L7

L29 39 SEA SPE=ON ABB=ON PLU=ON L28 AND L22

L30 32 SEA SPE=ON ABB=ON PLU=ON L29 AND ANST/RL

L31 31 SEA SPE=ON ABB=ON PLU=ON L30 AND (1840-2003)/PRY,AY,PY

FILE 'REGISTRY' ENTERED AT 10:29:27 ON 03 JUN 2010

L32 32 SEA SUB=L16 SSS SAM L8

L33 STR L8

L34 7 SEA SUB=L16 SSS SAM L33

L35 167 SEA SUB=L16 SSS FUL L33

SAV L35 WHI790A/A

FILE 'HCAPLUS' ENTERED AT 10:35:27 ON 03 JUN 2010

L36 3081 SEA SPE=ON ABB=ON PLU=ON L35

10/530,790

L37 37 SEA SPE=ON ABB=ON PLU=ON L36 AND L22
L38 36 SEA SPE=ON ABB=ON PLU=ON L37 AND (1840-2003)/PRY,AY,PY
L39 1 SEA SPE=ON ABB=ON PLU=ON L38 AND L1

FILE 'REGISTRY' ENTERED AT 10:37:56 ON 03 JUN 2010
L40 1 SEA SPE=ON ABB=ON PLU=ON 7440-05-3/RN

FILE 'HCAPLUS' ENTERED AT 10:38:36 ON 03 JUN 2010
L41 116334 SEA SPE=ON ABB=ON PLU=ON L40
L42 36 SEA SPE=ON ABB=ON PLU=ON L38 AND L41
L43 18 SEA SPE=ON ABB=ON PLU=ON L24 AND (1840-2003)/PRY,AY,PY
L44 36 SEA SPE=ON ABB=ON PLU=ON L42 OR L43
L45 22 SEA SPE=ON ABB=ON PLU=ON L31 AND L44
L46 36 SEA SPE=ON ABB=ON PLU=ON L44 OR L45
L47 9 SEA SPE=ON ABB=ON PLU=ON L31 NOT L46
L48 27 SEA SPE=ON ABB=ON PLU=ON L27 AND L46
L49 36 SEA SPE=ON ABB=ON PLU=ON L46 OR L48